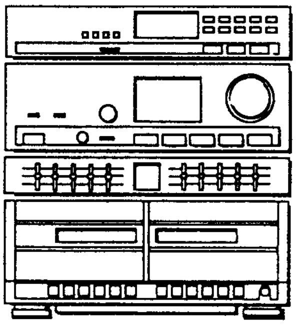
S/M Code No.89 - 074 DATE OF ISSUE 8/1989 - I

+89

AIWA®

CX-75
CP-75

SERVICE MANUAL



STEREO SYSTEM

- BASIC TAPE MECHANISM : TN - 21ZFW (E,Z)
TN - 521ZSW (E1,K)
- TYPE. E,K,Z

SYSTEM	CASSEIVER	SPEAKER SYSTEM	REMOTE CONTROLLER	TURNTABLE	CD PLAYER
X - 75 K Type	CX - 75	SX - 705	RC - T75F	PX - E75	※3 DX - M75 (OPTIONAL)
CP - 75 E Type	CX - 75	※1 SX - 705	RC - T75F	※2 PX - E75	※3 DX - M75 (OPTIONAL)
CP - 75 E1 Type	CX - 75	※1 SX - 705	RC - T75F	※2 PX - E75	※3 DX - M75 (OPTIONAL)
CP - 75 Z Type	CX - 75	※1 SX - 705	RC - T75F	※2 PX - E75	※3 DX - M75 (OPTIONAL)

※1 CP - 75 does not have SX - 705.

※2 As to the service information of PX - E75.
See The individual service mamual of PX - E75/E45.

※3 As to the service information of DX - M75.
See The individual service mamual of DX - M75/M76.

AIWA Co., Ltd.
Tokyo Japan
Printed in Japan

+89

SPECIFICATIONS

Receiver	**CX-75E, E1, K, Z**
Power source	CX-75E, E1, Z 220V, 50/60Hz CX-75K 240V, 50/60Hz
Power consumption	210 W (system total 215 W)
Power output	38 W+38 W (6 ohms+16 ohms total, EIAJ, 1 kHz) 30 W+30 W (6 ohms+16 ohms total, T.H.D. 1%, 1 kHz)
Frequency response	NORMAL tape: 40–12,500 Hz CrO₂ tape: 40–14,000 Hz (PB only) METAL tape: 40–16,000 Hz (PB only)
Signal-to-noise ratio	58 dB (NORMAL tape, DOLBY NR ON, JIS–A)
Frequency ranges	FM: 87.5–108 MHz MW: 522–1,611 kHz LW: 144–290 kHz
Antenna	FM: 75 ohms MW/LW: Loop antenna
Wow & flutter	0.17% (WRMS)
Output terminals	SPEAKERS: 6 ohms+16 ohms HEADPHONES: 8–32 ohms
Input terminals	PHONO: 220 mV/47 k ohms VCR/AUX: 150 mV–550 mV/47 k ohms CD: 250 mV/47 k ohms
Dimensions	360(W) × 335(H) × 332(D) mm
Weight	7.7 kg

Speaker	**SX-705**
Type	2-way Bass reflex type
Speaker	Woofer 170 mm cone type Tweeter 50 mm cone type
Impedance	6 ohms
Allowable maximum input	40 W
Dimensions	255(W) × 430(H) × 170(D) mm
Weight	3.5 kg

- Design and specifications are subject to change without notice.
- Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.
- "Dolby", the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

IC DESCRIPTION

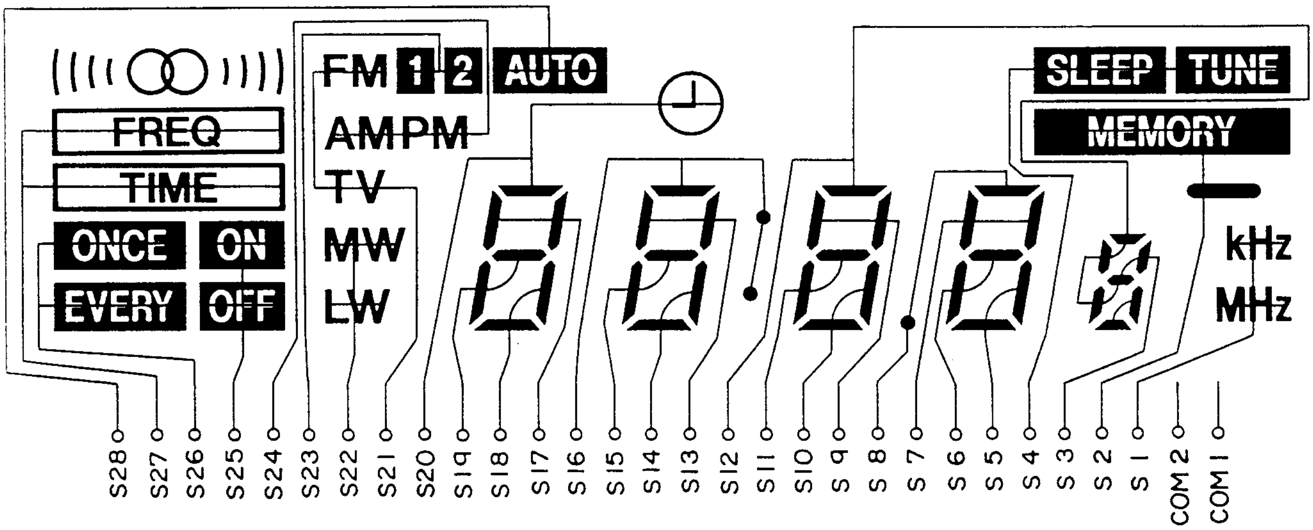
IC, LC7230 – 8239

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1
80</td><td>X IN
$\overline{\text{X OUT}}$</td><td>–</td><td>A 4.5MHz crystal oscillator is connected to these pins.</td></tr>
<tr><td>2
79</td><td>TEST2
TEST1</td><td>–</td><td>Test terminal connected by GND.</td></tr>
<tr><td>35~32
4
3</td><td>KI0~KI3
KI4
KI5</td><td>I</td><td>Key inputs.</td></tr>
<tr><td>5</td><td>REMOCON</td><td>I</td><td>Remote control serial data input.</td></tr>
<tr><td>6</td><td>POW SW</td><td>I</td><td>Power on/off control input. Controls POW CONT at pin 12.
Power is turned on and off every time "H" is input.</td></tr>
<tr><td>7</td><td>$\overline{\text{AUX}}$</td><td>O</td><td><table><tr><td>TUNER</td><td>CD</td><td>PHONO</td><td>AUX</td><td>TAPE</td></tr><tr><td>H</td><td>H</td><td>H</td><td>L</td><td>L</td></tr></table>* ⑦ is not used (H, U, C)</td></tr>
<tr><td>8
9
10</td><td>$\overline{\text{FM}}$
$\overline{\text{LW}}$
$\overline{\text{MW}}$</td><td>O</td><td>Band switching outputs.<table><tr><td></td><td>FM</td><td>MW(AM)</td><td>LW*</td></tr><tr><td>⑧ $\overline{\text{FM}}$</td><td>L</td><td>H</td><td>H</td></tr><tr><td>⑨ $\overline{\text{LW}}$</td><td>H</td><td>H</td><td>L</td></tr><tr><td>⑩ $\overline{\text{MW}}$</td><td>H</td><td>L</td><td>H</td></tr></table>* ⑨, ⑩ is not used (H, U, C) *Only for the E, K, Z specifications</td></tr>
<tr><td>11</td><td>$\overline{\text{FM MONO}}$</td><td>O</td><td>Output switched by the mode switch.
"L" in the FM AUTO mode and when AM "0" is displayed.</td></tr>
<tr><td>12</td><td>POW CONT</td><td>O</td><td>Power on/off control output.
The output is switched between "H" and "L" every time pin 6 (POW SW) goes "H".</td></tr>
<tr><td>13</td><td>$\overline{\text{K. MUTE}}$</td><td>O</td><td>Outputs a muting signal when a key is operated. Active "L".</td></tr>
<tr><td>14
15
16</td><td>CLOCK
DATA
STROBE</td><td>O</td><td>Control signal outputs for the electronic volume IC, TC-9154AP.
When power is turned on, the volume is restored to the position where it was set immediately before power was turned off.</td></tr>
<tr><td>17
18
19</td><td>FUNCTION A
FUNCTION B
FUNCTION C</td><td>O</td><td>Function switching outputs.<table><tr><td></td><td>TUNER</td><td>CD</td><td>PHONO</td><td>AUX</td><td>TAPE</td></tr><tr><td>⑰</td><td>H</td><td>H</td><td>L</td><td>L</td><td>L</td></tr><tr><td>⑱</td><td>H</td><td>L</td><td>H</td><td>L</td><td>L</td></tr><tr><td>⑲</td><td>H</td><td>H</td><td>H</td><td>H</td><td>L</td></tr></table>When power is turned on, the last function immediately before power was turned off is restored.</td></tr>
<tr><td>20</td><td>T5</td><td>O</td><td>Outputs data to display the function and volume.
The LEDs indicating the function and volume are driven by shift register IC702, TC74HC164AP.</td></tr>
<tr><td>30~27
21</td><td>T0~T3
T4</td><td>O</td><td>Key scan outputs.</td></tr>
<tr><td>31, 73</td><td>V_{DD}</td><td>–</td><td>Power supply pins.</td></tr>
<tr><td>22</td><td>CK</td><td>O</td><td>Outputs a clock signal to the IC, TC74HC164AP (shift register) which drives the function and volume LEDs.</td></tr>
<tr><td>23</td><td>$\overline{\text{C}}$</td><td>O</td><td>Output obtained by inverting FUNCTION C at pin 19. TAPE LED lighting output.</td></tr>
<tr><td>24</td><td>D2</td><td>O</td><td>MUTE LED lighting output.</td></tr>
<tr><td>25</td><td>D1</td><td>O</td><td>VOL DOWN LED lighting output.</td></tr>
<tr><td>26</td><td>D0</td><td>O</td><td>VOL UP LED lighting output.</td></tr>
<tr><td>36~63</td><td>S28~S1</td><td>O</td><td>Segment outputs to light the LCD.</td></tr>
</table>

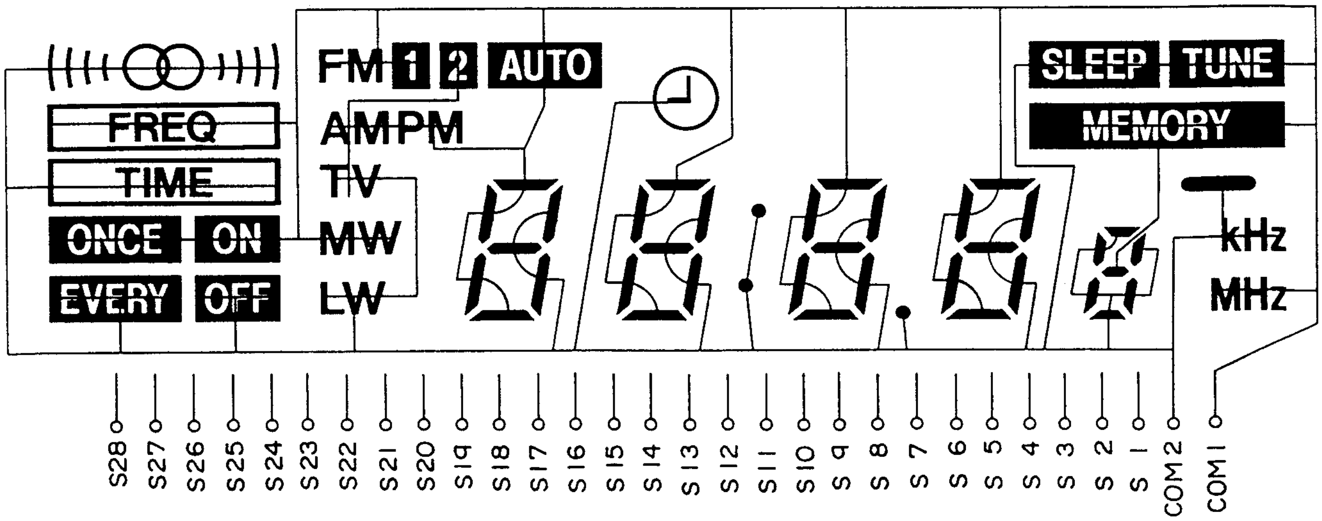
Pin No.	Pin Name	I/O	Description
65 64	COM1 COM2	O	Common outputs to light the LCD.
66	$\overline{\text{INT}}$	I	Remote control interruption input.
67	$\overline{\text{HOLD}}$	I	"L" input sets the unit to the HOLD mode. Goes "L" when a power failure occurs and sets the HOLD mode. The unit enters the low current consumption mode in the HOLD mode and can hold the preset stations in memory for a longer time.
68	$\overline{\text{RESET}}$	I	Reset pin. "L" input resets the IC.
69	$\overline{\text{SD}}$	I	Tuning auto scanning stop input. "L" input stops scanning and $\boxed{\text{TUNE}}$ lights in the LCD.
70, 71	———	—	Not used.
72	$\overline{\text{STE}}$	I	Input to light the stereo indicator [(((◯◯)))] in the FM mode. Active "L".
74	FM IN	I	FM local oscillator input.
75	AM IN	I	AM local oscillator input.
76	Vss	—	Connected by GND.
77 78	$\overline{\text{EO1}}$ $\overline{\text{EO2}}$	O	Tuning error outputs. (⑱ is not used.)

LCD DISPLAY

SEGMENT


FREQ
TIME
ONCE
ON
EVERY
OFF
FM
1
2
AUTO
AM
PM
TV
MW
LW
SLEEP
TUNE
MEMORY
kHz
MHz
S28
S27
S26
S25
S24
S23
S22
S21
S20
S19
S18
S17
S16
S15
S14
S13
S12
S11
S10
S9
S8
S7
S6
S5
S4
S3
S2
S1
COM2
COM1

COMMON


FREQ
TIME
ONCE
ON
EVERY
OFF
FM
1
2
AUTO
AM
PM
TV
MW
LW
SLEEP
TUNE
MEMORY
kHz
MHz
S28
S27
S26
S25
S24
S23
S22
S21
S20
S19
S18
S17
S16
S15
S14
S13
S12
S11
S10
S9
S8
S7
S6
S5
S4
S3
S2
S1
COM2
COM1

ELECTRICAL MAIN PARTS LIST

--- IC ---

REF.NO.	PART NO.	DESCRIPTION
	87-020-981-010	IC,CX1102
	87-001-350-019	IC,HD14052BP
	87-020-566-019	IC,LA1265
	87-001-654-010	IC,LC7230-8239
	87-020-680-019	IC,NJM2068S
	87-020-758-019	IC,NJM2068SD
	87-027-235-019	IC,NJM4558D
	87-020-966-010	IC,STK4142-2(Z)
	87-001-582-019	IC,STK4152-2(E,E1,K)
	87-020-446-019	IC,TA7343AP
	87-001-655-019	IC,TC74HC164AP
	87-001-476-019	IC,TC9154AP

--- TRANSISTOR ---

REF.NO.	PART NO.	DESCRIPTION
	87-026-165-019	FET,3SK73GR(Z)
	89-501-615-019	FET,2SK161GR
	89-502-415-019	FET,2SK241GR
	89-502-464-019	FET,2SK246Y
	89-503-735-019	FET,2SK373GR
	89-109-521-019	TRANSISTOR,2SA952K
	89-110-155-019	TRANSISTOR,2SA1015GR
	89-209-412-010	TRANSISTOR,2SB941Q,P
	89-309-456-019	TRANSISTOR,2SC945LP
	89-313-834-019	TRANSISTOR,2SC1383S
	89-318-154-019	TRANSISTOR,2SC1815(Y)
	89-318-155-019	TRANSISTOR,2SC1815(GR)
	89-319-233-019	TRANSISTOR,2SC1923(O)
	89-320-011-019	TRANSISTOR,2SC2001K
	89-412-755-010	TRANSISTOR,2SD1275
	87-026-214-019	TRANSISTOR,DTA114YS
	87-026-215-019	TRANSISTOR,DTC114YS
	87-026-366-019	TRANSISTOR,RN1204

--- DIODE ---

REF.NO.	PART NO.	DESCRIPTION
	87-001-811-019	DIODE,1S1885
	87-020-465-019	DIODE,1SS133
	87-020-144-019	DIODE,DBA40C
	87-020-123-019	DIODE,DS446
	87-027-346-019	DIODE,ZENER HZ-11A2L
	87-027-556-010	DIODE,ZENER HZ-11B3
	87-027-393-019	DIODE,ZENER HZ-4C2
	87-027-475-019	DIODE,ZENER HZ-6B1
	87-027-332-019	DIODE,ZENER HZ-6B1L
	87-027-702-019	DIODE,ZENER HZ-6C2L

--- TUNER CIRCUIT BOARD SECTION ---

REF.NO.	PART NO.	DESCRIPTION
BPF101	87-030-105-010	FILTER,BPMB 6A(Z)
C101	★87-018-100-019	CAP,CERA SS 4.7P K 50V SL(K,E,E1)
C101	★87-018-104-019	CAP,CERA SS 10P(Z)
C102	★87-018-134-019	CAP,CERA SS 0.01
C103	★87-018-102-019	CAP,CERA SS 6.8P(K,E,E1)
C103	★87-018-105-019	CAP,CERA SS 12P(Z)
C104	★87-018-105-019	CAP,CERA SS 12P(Z)
C105	★87-018-097-019	CAP,CERA SS 2.2P
C106	★87-018-100-019	CAP,CERA SS 4.7P K 50V SL(K,E,E1)
C106	★87-018-106-019	CAP,CERA SS 15P SL(Z)
C107	★87-018-096-019	CAP,CERA SS 1P
C108	★87-018-119-019	CAP,CERA SS 100P
C109	★87-018-134-019	CAP,CERA SS 0.01
C110	★87-018-134-019	CAP,CERA SS 0.01
C111	★87-010-374-019	CAP,ELECT 47-10V
C112	★87-010-401-019	CAP,ELECT 1-50V
C113	★87-018-116-019	CAP,CERA SS 56P
C114	★87-018-107-019	CAP,CERA SS 18P
C115	★87-018-134-019	CAP,CERA SS 0.01
C116	★87-018-134-019	CAP,CERA SS 0.01
C117	★87-018-100-019	CAP,CERA SS 4.7P K 50V SL(Z)
C118	★87-018-134-019	CAP,CERA SS 0.01(Z)
C121	★87-010-544-019	CAP,ELECT 0.1-50V
C122	★87-014-049-019	CAP,PP 470P
C123	★87-018-108-019	CAP,CERA SS 20P
C125	★87-018-121-019	CAP,CERA SS 150P
C126	★87-014-050-019	CAP,PP 510P
C127	★87-010-405-019	CAP,ELECT 10-50V SME
C128	★87-018-134-019	CAP,CERA SS 0.01
C129	★87-018-134-019	CAP,CERA SS 0.01
C130	★87-018-134-019	CAP,CERA SS 0.01(K,E,E1)
C131	★87-018-134-019	CAP,CERA SS 0.01
C132	★87-018-134-019	CAP,CERA SS 0.01
C133	★87-010-401-019	CAP,ELECT 1-50V
C134	★87-010-382-019	CAP,ELECT 22-25V SME
C135	★87-018-125-019	CAP,CERA SS 330P
C136	★87-010-402-019	CAP,ELECT 2.2-50V
C137	★87-010-402-019	CAP,ELECT 2.2-50V
C139	★87-018-134-019	CAP,CERA SS 0.01
C140	★87-010-405-019	CAP,ELECT 10-50V SME
C141	★87-010-544-019	CAP,ELECT 0.1-50V
C142	★87-010-403-019	CAP,ELECT 3.3-50V SME
C143	★87-010-404-019	CAP,ELECT 4.7-50V SME
C144	★87-018-134-019	CAP,CERA SS 0.01
C145	★87-018-134-019	CAP,CERA SS 0.01
C146	★87-010-401-019	CAP,ELECT 1-50V
C147	★87-018-134-019	CAP,CERA SS 0.01
C148	★87-010-402-019	CAP,ELECT 2.2-50V SME(Z)
C150	★87-010-402-019	CAP,ELECT 2.2-50V SME(Z)
C151	★87-010-401-019	CAP,ELECT 1-50V
C152	★87-010-403-019	CAP,ELECT 3.3-50V SME
C153	★87-014-057-019	CAP,PP 0.001
C154	★87-010-405-019	CAP,ELECT 10-50V SME
C155	★87-010-248-019	CAP,ELECT 220-10V
C158	★87-010-402-019	CAP,ELECT 2.2-50V
C159	★87-010-402-019	CAP,ELECT 2.2-50V
C160	★87-018-195-019	CAP,CERA SS 1200P
C161	★87-018-195-019	CAP,CERA SS 1200P
C162	★87-018-199-019	CAP,CERA SS 3300P
C163	★87-018-199-019	CAP,CERA SS 3300P
C171	★87-018-134-019	CAP,CERA SS 0.01
C172	★87-010-374-019	CAP,ELECT 47-10V
C173	★87-010-263-019	CAP,ELECT 100-10V
C174	★87-018-134-019	CAP,CERA SS 0.01
C175	★87-010-260-019	CAP,ELECT 47-25V
C201	★87-018-134-019	CAP,CERA SS 0.01
C202	★87-018-134-019	CAP,CERA SS 0.01
C203	★87-018-134-019	CAP,CERA SS 0.01
C205	★87-018-134-019	CAP,CERA SS 0.01
C206	★87-018-134-019	CAP,CERA SS 0.01(Z)
C207	★87-018-134-019	CAP,CERA SS 0.01(Z)
CF101	★87-008-261-019	FILTER,SFE 10.7 MA5-A(E,E1,K)
CF101	★82-799-621-019	CF MS2-A(Z)
CF102	★87-008-261-019	FILTER,SFE 10.7 MA5-A
CF103	★87-008-261-019	FILTER,SFE 10.7 MA5-A(Z)
CF131	★82-794-670-019	BFU 450C4N
CF132	★87-008-405-019	CFLZ-450A N
D101	87-027-900-019	VARI,CAP 1SV147
D103	87-027-900-019	VARI,CAP 1SV147
D104	87-027-900-019	VARI,CAP 1SV147

REF.NO.	PART NO.	DESCRIPTION
D105	87-027-900-019	VARI,CAP 1SV147(Z)
D121	81-754-634-019	VARI,CAP KV1260
⚠FR171	87-029-090-019	RES,FUSE 22-1/4W
⚠FR172	87-029-017-010	RES,FUSE 10-1/4W
J20	★81-631-646-019	ANT.,TERMINAL 2P(ANTENNA)
J21	81-754-629-019	CONNECTOR XH M2P(MW/LW LOOP)(E,E1,K)
L101	★81-794-716-019	COIL,ANT 3/4 T
L102	★81-794-717-019	COIL,ANT 2-3/4 SPACE
L103	★82-791-627-019	COIL,ANT 2 FM
L104	★82-702-638-019	COIL,FM
L105	★87-005-151-019	COIL,2.2UH
L106	★82-794-683-019	IFT,FM 6T
L107	★87-007-259-019	COIL,FM OSC (7K)N
L108	★87-006-175-019	COIL,FM(4GANG)(Z)
L109	★87-005-151-019	COIL,2.2UH(Z)
L110	★87-005-151-019	COIL,2.2UH
L121	★87-006-176-019	COIL,MW ANT
L122	★82-794-687-019	COIL,OSC MW
L123	★87-006-177-019	COIL,LW ANT
L124	★82-794-688-019	COIL,OSC LW
L131	★81-631-611-019	COIL,QUAD (SINGLE)
L132	★82-794-697-019	FILTER,ANTI BIRDIE(Z)
L151	★81-631-643-019	COIL,1 POLE MPX
L152	★81-631-643-019	COIL,1 POLE MPX
SFR131	★87-024-174-019	SFR,33K
SFR151	★87-024-171-019	SFR,4.7K
TC101	★87-011-219-019	CAP,TRIMMER 10P VCT
TC102	★87-011-219-019	CAP,TRIMMER 10P VCT
TC103	★87-011-219-019	CAP,TRIMMER 10P VCT(Z)
TC121	★87-011-220-019	CAP,TRIMMER 20P VCT
TC122	★87-011-221-019	CAP,TRIMMER 30P VCT

== MAIN CIRCUIT BOARD SECTION ==

REF.NO.	PART NO.	DESCRIPTION
⚠	87-033-147-019	FUSE CLAMP
C301	★87-018-123-019	CAP,CERA SS 220P(K,E1)
C301	★87-018-126-019	CAP,CERA SS 390P(E,Z)
C302	★87-018-123-019	CAP,CERA SS 220P(K,E1)
C302	★87-018-126-019	CAP,CERA SS 390P(E,Z)
C305	★87-010-400-019	CAP,ELECT 0.47-50V SME
C306	★87-010-400-019	CAP,ELECT 0.47-50V SME
C307	★87-018-127-019	CAP,CERA SS 470P
C308	★87-018-127-019	CAP,CERA SS 470P
C311	★87-010-546-019	CAP,ELECT 0.33-50V SME
C312	★87-010-546-019	CAP,ELECT 0.33-50V SME
C313	★87-010-402-019	CAP,ELECT 2.2-50V
C314	★87-010-402-019	CAP,ELECT 2.2-50V
C315	★87-010-544-019	CAP,ELECT 0.1-50V
C316	★87-010-544-019	CAP,ELECT 0.1-50V
C319	★87-018-117-019	CAP,CERA SS 68P
C320	★87-018-117-019	CAP,CERA SS 68P
C323	★87-018-125-019	CAP,CERA SS 330P
C324	★87-018-125-019	CAP,CERA SS 330P
C325	★87-010-404-019	CAP,ELECT 4.7-50V SME
C326	★87-010-404-019	CAP,ELECT 4.7-50V SME
C327	★87-018-121-019	CAP,CERA SS 150P
C328	★87-018-121-019	CAP,CERA SS 150P
C329	★87-018-129-019	CAP,CERA SS 680P
C330	★87-018-129-019	CAP,CERA SS 680P
C331	★87-010-404-019	CAP,ELECT 4.7-50V SME
C332	★87-010-404-019	CAP,ELECT 4.7-50V SME
C333	★87-010-404-019	CAP,ELECT 4.7-50V SME
C334	★87-010-404-019	CAP,ELECT 4.7-50V SME
C335	★87-010-256-019	CAP,ELECT 0.68-50V
C336	★87-010-256-019	CAP,ELECT 0.68-50V
C337	★87-010-404-019	CAP,ELECT 4.7-50V SME
C338	★87-010-404-019	CAP,ELECT 4.7-50V SME
C341	★87-018-134-019	CAP,CERA SS 0.01
C345	★87-018-131-019	CAP,CERA SS 1000P
C346	★87-018-131-019	CAP,CERA SS 1000P
C349	★87-018-134-019	CAP,CERA SS 0.01
C351	★87-010-406-019	CAP,ELECT 22-50V
C352	★87-010-260-019	CAP,ELECT 47-25V
C353	★87-010-260-019	CAP,ELECT 47-25V
C354	★87-010-384-019	CAP,ELECT 100-25V
C355	★87-010-263-019	CAP,ELECT 100-10V
C356	★87-010-404-019	CAP,ELECT 4.7-50V SME
C357	★87-010-260-019	CAP,ELECT 47-25V
C359	★87-018-134-019	CAP,CERA SS 0.01
C360	★87-010-384-019	CAP,ELECT 100-25V
C365	★87-010-371-019	CAP,ELECT 470-6.3V
C366	★87-010-101-019	CAP,ELECT 220-16V
C367	★87-010-371-019	CAP,ELECT 470-6.3V
C368	★87-018-134-019	CAP,CERA SS 0.01
C369	★87-018-134-019	CAP,CERA SS 0.01
C371	★87-018-134-019	CAP,CERA SS 0.01(Z)
C372	★87-018-134-019	CAP,CERA SS 0.01(Z)
C373	★87-018-115-019	CAP,CERA SS 47P(Z)
C374	★87-018-115-019	CAP,CERA SS 47P(Z)
C375	★87-018-134-019	CAP,CERA SS 0.01(Z)
C376	★87-018-134-019	CAP,CERA SS 0.01(Z)
C377	★87-018-115-019	CAP,CERA SS 47P(Z)
C378	★87-018-115-019	CAP,CERA SS 47P(Z)
C379	★87-018-119-019	CAP,CERA SS 100P(Z)
C380	★87-018-119-019	CAP,CERA SS 100P(Z)
C381	★87-018-119-019	CAP,CERA SS 100P(Z)
C382	★87-018-119-019	CAP,CERA SS 100P(Z)
C383	★87-018-134-019	CAP,CERA SS 0.01(Z)
C384	★87-018-134-019	CAP,CERA SS 0.01(Z)
C385	★87-018-119-019	CAP,CERA SS 100P(Z)
C386	★87-018-119-019	CAP,CERA SS 100P(Z)
C387	★87-018-131-019	CAP,CERA SS 1000P(Z)
C388	★87-018-134-019	CAP,CERA SS 0.01(Z)
C501	★87-010-382-019	CAP,ELECT 22-25V SME
C502	★87-010-101-019	CAP,ELECT 220-16V
C503	★87-010-263-019	CAP,ELECT 100-10V
C504	★87-018-134-019	CAP,CERA SS 0.01
C505	★87-018-134-019	CAP,CERA SS 0.01
C506	★87-010-101-019	CAP,ELECT 220-16V
C507	★87-010-402-019	CAP,ELECT 2.2-50V
C508	★87-018-125-019	CAP,CERA SS 330P
C509	★87-010-263-019	CAP,ELECT 100-10V
C510	★87-010-384-019	CAP,ELECT 100-25V
C512	★87-010-453-019	CAP,ELECT 4700-25V
C513	★87-010-260-019	CAP,ELECT 47-25V
C514	★87-010-384-019	CAP,ELECT 100-25V
C515	★87-010-733-019	CAP,ELECT 3300-42V
C516	★87-010-733-019	CAP,ELECT 3300-42V
C517	★87-010-263-019	CAP,ELECT 100-10V
C518	★87-010-405-019	CAP,ELECT 10-50V SME
C519	★87-010-402-019	CAP,ELECT 2.2-50V
C523	★87-018-121-019	CAP,CERA SS 150P
C524	★87-018-121-019	CAP,CERA SS 150P
C525	★87-010-404-019	CAP,ELECT 4.7-50V SME
C526	★87-010-404-019	CAP,ELECT 4.7-50V SME
C527	★87-010-382-019	CAP,ELECT 22-25V SME
C528	★87-010-382-019	CAP,ELECT 22-25V SME
C529	★87-010-408-019	CAP,ELECT 47-50VX
C530	★87-010-408-019	CAP,ELECT 47-50VX

REF.NO.	PART NO.	DESCRIPTION
C534	*87-010-405-019	CAP,ELECT 10-50V SME
C540	*87-010-405-019	CAP,ELECT 10-50V SME
C561	*87-018-115-019	CAP,CERA SS 47P(Z)
C562	*87-018-115-019	CAP,CERA SS 47P(Z)
C563	*87-018-119-019	CAP,CERA SS 100P(Z)
C564	*87-018-119-019	CAP,CERA SS 100P(Z)
C565	*87-018-134-019	CAP,CERA SS 0.01(Z)
C566	*87-018-134-019	CAP,CERA SS 0.01(Z)
C567	*87-018-131-019	CAP,CERA SS 1000P(Z)
C568	*87-018-131-019	CAP,CERA SS 1000P(Z)
C569	*87-018-132-019	CAP,CERA SS 2200P(Z)
C570	*87-018-132-019	CAP,CERA SS 2200P(Z)
C578	*87-018-131-019	CAP,CERA SS 1000P(Z)
CON7	87-049-833-019	5P CONNECTOR SOCKET(PHONO)
⚠F1	87-035-364-010	FUSE,T1.6A
⚠FR100	87-029-125-019	RES,FUSE 1-1/4W
⚠FR103	87-029-105-019	RES,FUSE 10-1/2W(K,E,E1)
⚠FR103	87-029-366-019	RES,FUSE 4.7-1/2W(Z)
⚠FR104	87-029-105-019	RES,FUSE 10-1/2W(K,E,E1)
⚠FR104	87-029-366-019	RES,FUSE 4.7-1/2W(Z)
⚠FR106	87-029-102-010	RES,FUSE 47-1/4W
⚠FR107	87-029-089-019	RES,FUSE 4.7-1/4W
⚠FR393	87-029-102-019	RES,FUSE 47-1/4W
⚠FR394	87-029-125-019	RES,FUSE 1-1/4W
J1	*87-049-868-019	JACK PIN 4P(VCR/AUX,CD)(K,E,E1)
J1	*87-009-023-019	JACK PIN YKL21-0349(VCR/AUX,CD)(Z)
J3	87-009-079-019	JACK,6.3-W/S(PHONES)
J4	*87-033-205-019	TERMINAL,SP-4P(SPEAKERS)(K,E,E1)
J4	*87-033-206-019	TERMINAL,SP-4P(SPEAKERS)(Z)
J5	*87-049-851-019	JACK PIN 2P(SURROUND SPEAKERS)
L301	*87-003-128-019	MICRO INDUCTOR 5.6MMH
L302	*87-003-128-019	MICRO INDUCTOR 5.6MMH
L321	*81-794-661-019	COIL,OSC
L501	*87-005-366-010	COIL,1UH(Z)
L502	*87-005-366-010	COIL,1UH(Z)
R531	87-022-050-010	RES,MF 0.22J-1W
R532	87-022-050-010	RES,MF 0.22J-1W
R563	87-025-311-010	RES,MF 220-1W
R564	87-025-311-010	RES,MF 220-1W
RY1	87-045-285-010	RELAY VB12 MB
SFR301	*87-024-167-019	SFR,470(K,E1)
SFR302	*87-024-167-019	SFR,470(K,E1)
SFR307	*87-024-167-019	SFR,470
SFR308	*87-024-167-019	SFR,470
SFR313	*87-024-173-019	SFR,22K
SFR314	*87-024-173-019	SFR,22K
SFR321	*87-024-174-019	SFR,33K
SFR322	*87-024-174-019	SFR,33K
SFR325	*87-021-801-019	SFR,10K(K,E1)
SFR325	*87-021-802-010	SFR,22K(E,Z)
VR14	87-021-864-019	VOLUME,10K(VCR/AUX INPUT LEVEL)
VR15	87-021-864-019	VOLUME,10K(VCR/AUX INPUT LEVEL)

FRONT CIRCUIT BOARD SECTION

REF.NO.	PART NO.	DESCRIPTION
C601	*87-010-071-019	CAP,ELECT 1-50 SRE
C602	*87-010-071-019	CAP,ELECT 1-50 SRE
C605	*87-010-419-019	CAP,ELECT 4.7-16 SRE
C606	*87-010-419-019	CAP,ELECT 4.7-16 SRE
C613	*87-018-201-019	CAP,CERA SS 5600P
C614	*87-018-201-019	CAP,CERA SS 5600P
C615	*87-018-205-019	CAP,CERA SS 0.022
C616	*87-018-205-019	CAP,CERA SS 0.022
C617	*87-018-199-019	CAP,CERA SS 3300P
C618	*87-018-199-019	CAP,CERA SS 3300P
C619	*87-018-134-019	CAP,CERA SS 0.01
C620	*87-018-134-019	CAP,CERA SS 0.01
C621	*87-018-133-019	CAP,CERA SS 4700P
C622	*87-018-133-019	CAP,CERA SS 4700P
C623	*87-010-067-019	CAP,ELECT 0.1-50
C624	*87-010-067-019	CAP,ELECT 0.1-50
C625	*87-010-068-019	CAP,ELECT 0.22-50 SRE
C626	*87-010-068-019	CAP,ELECT 0.22-50 SRE
C627	*87-010-075-019	CAP,ELECT 10-16V
C628	*87-010-075-019	CAP,ELECT 10-16V
C629	*87-010-071-019	CAP,ELECT 1-50 SRE
C630	*87-010-071-019	CAP,ELECT 1-50 SRE
C631	*87-010-071-019	CAP,ELECT 1-50 SRE
C632	*87-010-071-019	CAP,ELECT 1-50 SRE
C633	*87-010-234-019	CAP,ELECT 47-16V SRE
C634	*87-010-234-019	CAP,ELECT 47-16V SRE
C635	*87-018-196-019	CAP,CERA SS 1500P
C636	*87-018-196-019	CAP,CERA SS 1500P
C637	*87-010-078-019	CAP,ELECT 47-6.3V SRE
C681	*87-018-134-019	CAP,CERA SS 0.01(Z)
C702	*87-018-134-019	CAP,CERA SS 0.01
C703	*87-010-404-019	CAP,ELECT 4.7-50V SME
C704	*87-010-384-019	CAP,ELECT 100-25V
C705	*87-018-134-019	CAP,CERA SS 0.01
C706	*87-018-134-019	CAP,CERA SS 0.01
C707	*87-010-371-019	CAP,ELECT 470-6.3V
C708	*87-018-134-019	CAP,CERA SS 0.01
C709	*87-010-374-019	CAP,ELECT 47-10V
C710	*87-010-078-019	CAP,ELECT 47-6.3V SRE
CP701	87-001-533-010	REMOTE UNIT GP1U501(REMOTE SENSOR)
L701	*87-005-239-019	COIL,100UH
LCD701	83-317-612-019	LCD,3B(FREQ./TIMER DISPLAY)
LED1	87-001-124-019	LED,SLZ 381C(DOLBY-NR)
LED701	87-001-123-019	LED,SLZ-981C-02TI(VOLUME UP)
LED702	87-001-123-019	LED,SLZ-981C-02TI(VOLUME DOWN)
LED703	87-001-123-019	LED,SLZ-981C-02TI(MUTE)
LED704	87-001-124-019	LED,SLZ 381C(TAPE)
LED705	87-001-124-019	LED,SLZ 381C(TUNER)
LED706	87-001-124-019	LED,SLZ 381C(PHONO)
LED707	87-001-124-019	LED,SLZ 381C(VCR/AUX)
LED708	87-001-124-019	LED,SLZ 381C(CD)
LED709	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.1)
LED710	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.2)
LED711	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.3)
LED712	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.4)
LED713	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.5)
LED714	87-001-123-019	LED,SLZ-981C-02TI(VOL.INDI.6)
S21	87-036-175-019	PUSH SW(DOLBY-NR)
S31	87-036-175-019	PUSH SW(TAPE SELECTOR)
S61	87-036-175-019	PUSH SW(DUBBING SPEED)(K,E1)
S701	87-036-142-010	TACT SW(TIMER/STANDBY)
S702	87-036-142-010	TACT SW(SLEEP)
S703	87-036-142-010	TACT SW(DISPLAY)
S704	87-036-142-010	TACT SW(ST/MONO)
S705	87-036-142-010	TACT SW(VOLUME UP)
S706	87-036-142-010	TACT SW(VOLUME DOWN)
S707	87-036-142-010	TACT SW(VCR/AUX)
S708	87-036-142-010	TACT SW(CD)
S709	87-036-142-010	TACT SW(PHONO)
S710	87-036-142-010	TACT SW(TUNER)
S711	87-036-142-010	TACT SW(TAPE)
S712	87-036-142-010	TACT SW(TUN./TIM.UP)
S713	87-036-142-010	TACT SW(TUN./TIM.DOWN)
S714	87-036-142-010	TACT SW(BAND)

REF.NO.	PART NO.	DESCRIPTION
S715	87-036-142-010	TACT SW(SET)
S716	87-036-142-010	TACT SW(PRESET1)
S717	87-036-142-010	TACT SW(PRESET2)
S718	87-036-142-010	TACT SW(PRESET3)
S719	87-036-142-010	TACT SW(PRESET4)
S720	87-036-142-010	TACT SW(PRESET5)
S721	87-036-142-010	TACT SW(PRESET6)
S722	87-036-142-010	TACT SW(PRESET7)
S723	87-036-142-010	TACT SW(PRESET8)
S724	87-036-142-010	TACT SW(POWER)
TC701	★87-011-224-019	TRIMMER CERAMIC 30P S
VR1	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 70HZ)
VR2	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 70HZ)
VR3	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 350HZ)
VR4	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 350HZ)
VR5	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 1KHZ)
VR6	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 1KHZ)
VR7	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 3.5KHZ)
VR8	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 3.5KHZ)
VR9	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 10KHZ)
VR10	83-317-613-019	VR,SLIDE 100KB(S)(G.EQ 10KHZ)
VR13	81-626-624-019	VR,50KW(BALANCE)
X701	★87-030-174-019	XTAL,RESONATOR 4.5MHZ

=== LAMP CIRCUIT BOARD SECTION ===

REF.NO.	PART NO.	DESCRIPTION
C751	★87-010-263-019	CAP,ELECT 100-10V
C752	★87-010-379-019	CAP,ELECT 22-16V SME
C753	★87-010-400-019	CAP,ELECT 0.47-50V SME
C754	★87-010-546-019	CAP,ELECT 0.33-50V SME
⚠FR713	87-029-094-010	RES,FUSE 15-1/4W
⚠FR714	87-029-094-010	RES,FUSE 15-1/4W
PL701	83-317-611-010	LAMP 12V
PL702	83-317-611-010	LAMP 12V

=== POWER CIRCUIT BOARD SECTION ===

REF.NO.	PART NO.	DESCRIPTION
⚠	87-033-147-019	FUSE CLAMP
⚠F2	87-035-364-010	FUSE T1.6A
⚠PT1	83-317-606-019	POWER TRANSFORMER(K)
⚠PT1	83-317-607-018	POWER TRANSFORMER(E,Z,E1)

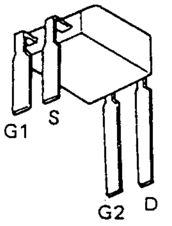
=== TR CIRCUIT BOARD SECTION ===

=== HEAD CIRCUIT BOARD SECTION === (K,E1 MODEL)

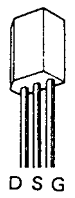
REF.NO.	PART NO.	DESCRIPTION
PH	S6-202-030-270	PB HEAD(D2)
S41	S6-403-020-040	SLIDE SW(FWD/REV)(D2)

=== MISCELLANEOUS ===

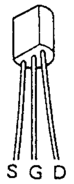
REF.NO.	PART NO.	DESCRIPTION
	★S6-201-130-030	DUMMY HEAD(D1)(E,Z)
⚠	★87-034-781-018	AC CORD E(E,Z,E1)
⚠	★87-034-592-018	AC CORD K(K)
⚠	★87-085-185-010	BUSHING AC CORD E
EH	S6-202-140-210	ERASE HEAD(D2)(E,Z)
EH	S6-202-140-210	ERASE HEAD(D1)(K,E1)
M101	S6-003-030-380	MOTOR(D1,2)
PH	S6-202-010-750	PB HEAD(D1)(E,Z)
RPH	S6-202-010-750	REC/PB HEAD(D2)(E,Z)
RPH	S6-202-010-750	REC/PB HEAD(D1)(K,E1)
S42	S6-401-010-610	LEAF SW(MOTOR,D1)(E,Z)
S42	S6-401-010-610	LEAF SW(MOTOR,D2)(K,E1)
S43	S6-401-011-310	LEAF SW(PLAY,D1)(E,Z)
S43	S6-401-011-310	LEAF SW(PLAY,D2)(K,E1)
S44	S6-401-011-340	LEAF SW(MOTOR,D2)(E,Z)
S44	S6-401-011-340	LEAF SW(MOTOR,D1)(K,E1)
S45	S6-401-010-380	LEAF SW(REC,D2)(E,Z)
S45	S6-401-010-380	LEAF SW(REC,D1)(K,E1)
S46	S6-401-011-490	LEAF SW(HI-SPEED,D1)(E,Z)



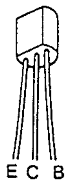
3SK73



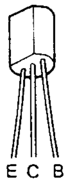
2SK161
2SK241



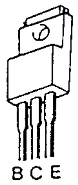
2SK246
2SK373



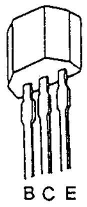
2SA952
2SA1015
2SC945
2SC1815
2SC1923
2SC2001



2SC1383

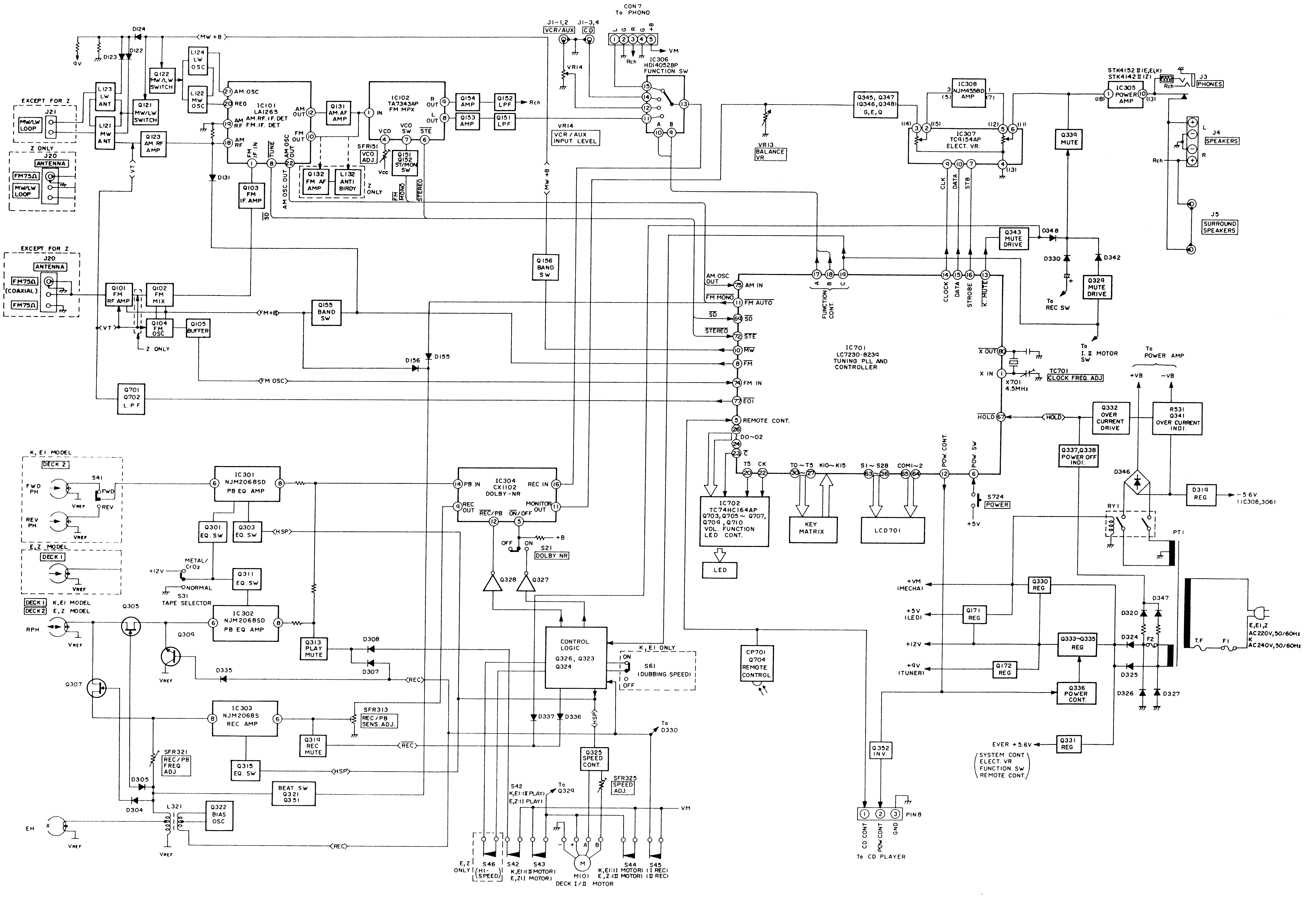


2SB941
2SD1275



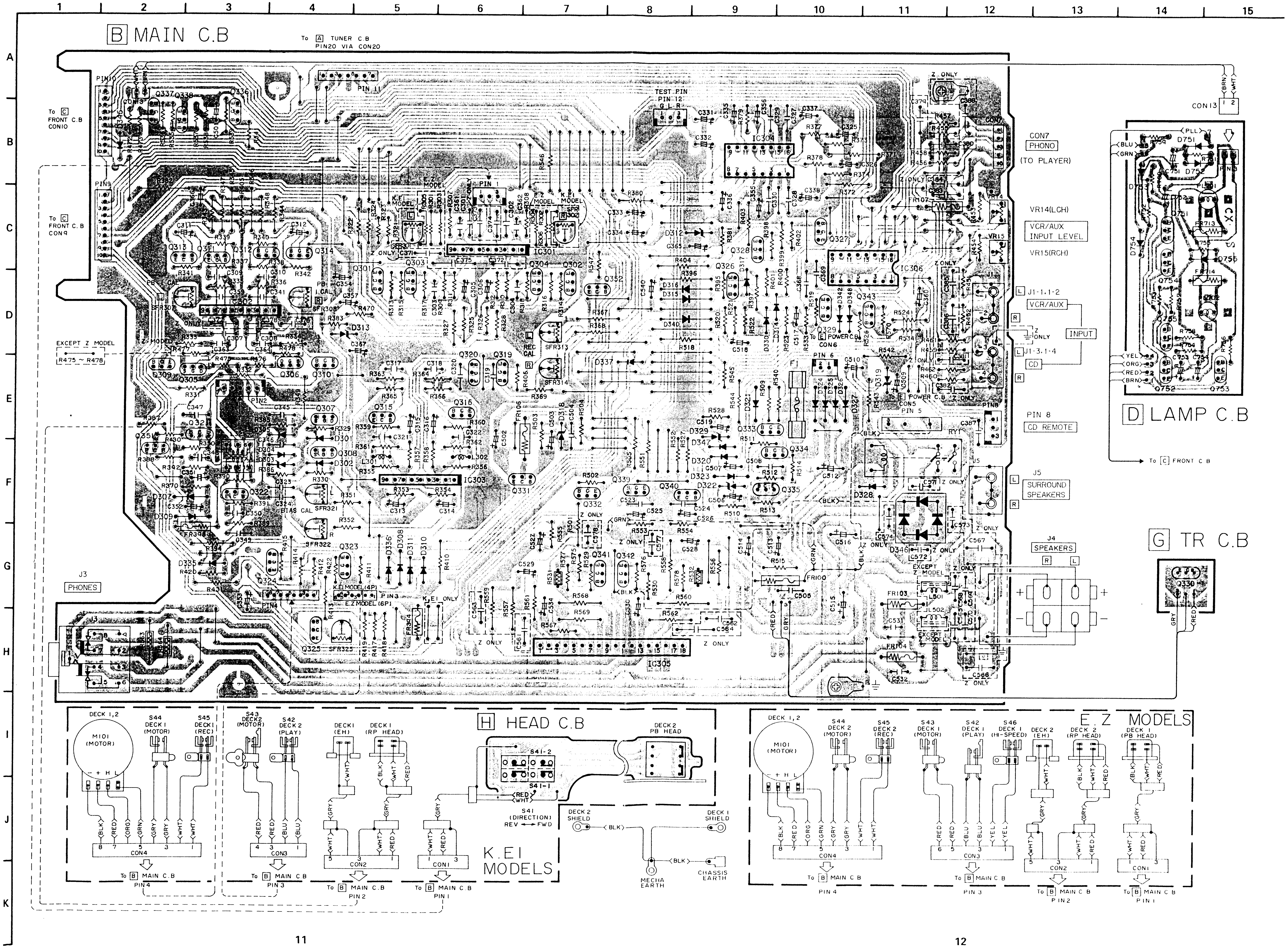
DTA114
DTC114
RN1204

BLOCK DIAGRAM

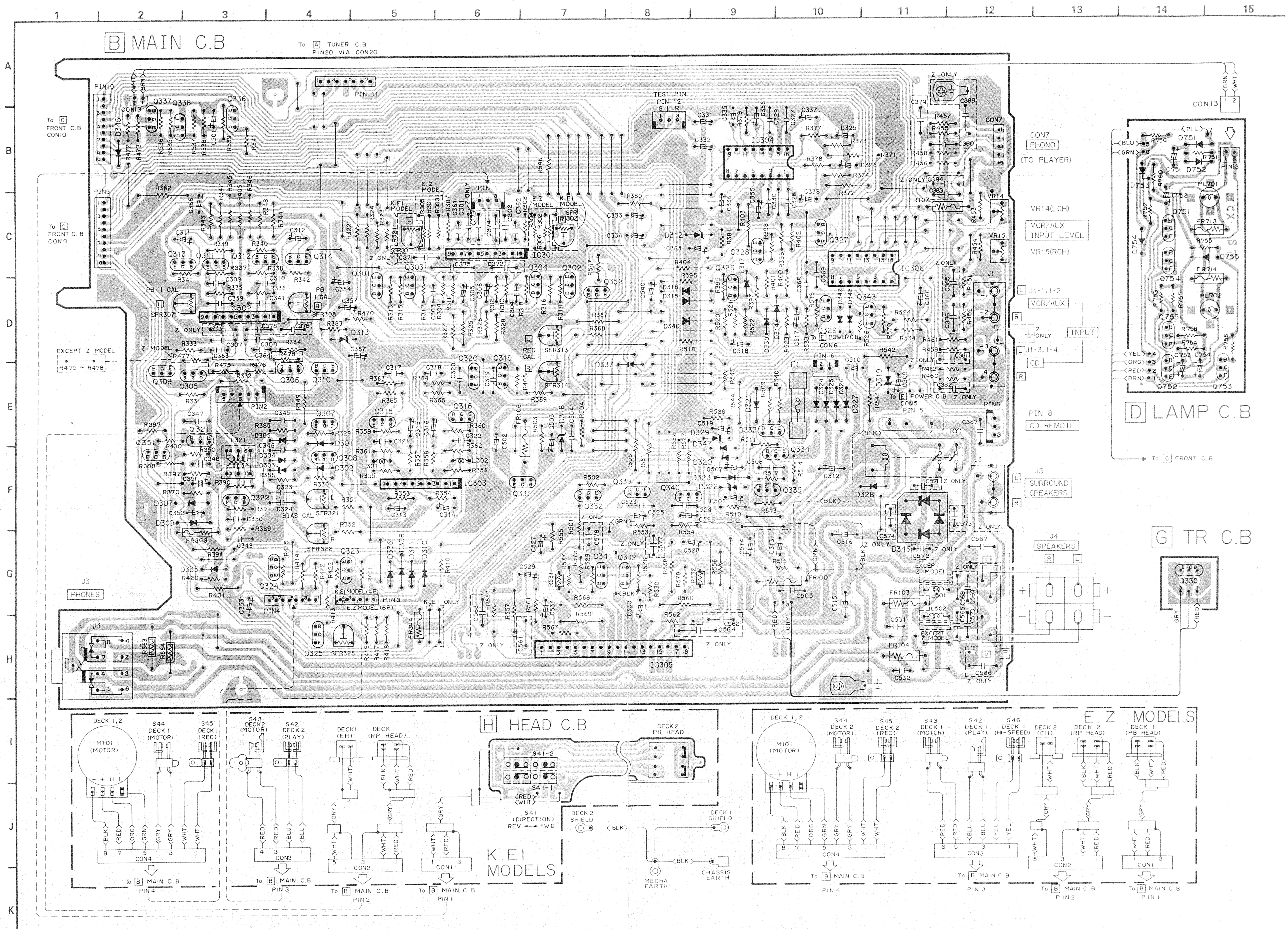


MW +B
D124
D122
D123
9V
L124 LW OSC
L122 MW OSC
Q122 MW/LW SWITCH
L123 LW ANT
L121 MW ANT
Q121 MW/LW SWITCH
Q123 AM RF AMP
EXCEPT FOR Z
J21
MW/LW LOOP
Z ONLY
J20 ANTENNA
FM75Ω
MW/LW LOOP
VT
IC101 LA1265 AM.RF.IF.DET FM.IF.DET
AM.OSC
REG
AM RF
FM IF IN
TUNE
AM OSC OUT
AM OUT
FM OUT
D131
Q103 FM IF. AMP
SD
Q131 AM.AF AMP
Q132 FM AF AMP
L132 ANTI BIRDY
Z ONLY
IC102 TA7343AP FM MPX
IN
VCO
VCO SW
STE
R OUT
L OUT
SFR151 VCO. ADJ.
Vcc
Q151 Q152 ST/MON SW
FM MONO
STEREO
Q154 AMP
Q153 AMP
Q152 LPF
Q151 LPF
Rch
MW +B
J1-1,2 VCR/AUX
J1-3,4 CD
VR14
VR14 VCR / AUX INPUT LEVEL
CON7 To PHONO
L G R G +B
VM
Rch
IC306 HD14052BP FUNCTION SW
A B
EXCEPT FOR Z
J20 ANTENNA
FM75Ω (COAXIAL)
FM75Ω
Q101 FM RF AMP
Q102 FM MIX
Q104 FM OSC
Q105 BUFFER
VT
Z ONLY
FM+B
Q155 BAND SW
Q156 BAND SW
D156
D155
FM OSC
Q701 Q702 LPF
VR13 BALANCE VR
Q345, Q347 (Q346, Q348) G, E, Q
IC308 NJM4558D AMP
IC307 TC9154AP ELECT. VR.
CLK
DATA
STB
STK4152 II (E,E(K)) STK4142 II (Z)
IC305 POWER AMP
J3 PHONES
Rch
L
R
Rch
J4 SPEAKERS
J5 SURROUND SPEAKERS
Q339 MUTE
Q343 MUTE DRIVE
D348
D330
D342
Q329 MUTE DRIVE
To REC SW
To I. II MOTOR SW
AM.OSC OUT
AM IN
FM MONO
FM AUTO
SD
STEREO
STE
MW
FM
FM IN
EOI
REMOTE CONT.
DO~D2
C
T5 CK
TO~T5
KIO~KI5
S1~S28
COM1~2
POW. CONT.
POW. SW
FUNCTION CONT.
A B C
CLOCK
DATA
STROBE
K. MUTE
IC701 LC7230-8239 TUNING PLL AND CONTROLLER
X OUT
X IN
X701 4.5MHz
TC701 CLOCK FREQ. ADJ
HOLD
To POWER AMP
+VB
-VB
Q332 OVER CURRENT DRIVE
R531 Q341 OVER CURRENT INDI.
Q337,Q338 POWER OFF INDI.
D346
D319 REG
-5.6V (IC308,306)
IC702 TC74HC164AP Q703, Q705 ~ Q707, Q709, Q710 VOL. FUNCTION LED CONT.
LED
KEY MATRIX
LCD701
S724 POWER
+5V
RY1
PT1
K, E1 MODEL
DECK 2
FWD PH
REV PH
S41
FWD
REV
VREF
E, Z MODEL
DECK 1
DECK 1 K, E1 MODEL
DECK 2 E, Z MODEL
RPH
IC301 NJM2068SD PB EQ AMP
Q301 EQ. SW
Q303 EQ. SW
HSP
+12V
METAL/CrO2
NORMAL
S31 TAPE SELECTOR
Q311 EQ. SW
Q305
Q309
IC302 NJM2068SD PB EQ AMP
Q307
Q313 PLAY MUTE
D308
D307
D335
REC
IC304 CX1102 DOLBY-NR
PB IN
REC IN
REC OUT
REC/PB
ON/OFF
MONITOR OUT
OFF ON
+B
S21 DOLBY NR
Q328
Q327
CONTROL LOGIC Q326, Q323 Q324
K, E1 ONLY
ON
S61 (DUBBING SPEED)
OFF
IC303 NJM2068S REC AMP
SFR313 REC/PB SENS. ADJ.
Q319 REC MUTE
SFR321 REC/PB FREQ ADJ
Q315 EQ. SW
D305
D304
BEAT SW Q321 Q351
L321
Q322 BIAS OSC
EH
D337
D336
HSP
To D330
Q325 SPEED CONT.
SFR325 SPEED ADJ.
S42 K,E1: (II PLAY) E,Z: (I PLAY)
To Q329
VM
E, Z ONLY
S46 (HI-SPEED)
S42 K,E1: (II MOTOR) E,Z: (I MOTOR)
S43
M101 DECK I/II MOTOR
S44 K,E1: (I MOTOR) E,Z: (II MOTOR)
S45 (I REC) (II REC)
CP701 Q704 REMOTE CONTROL
+VM (MECHA)
+5V (LED)
+12V
+9V (TUNER)
Q330 REG
Q171 REG
Q333~Q335 REG
Q172 REG
Q336 POWER CONT.
D347
D320
D324
F2
D325
D326
D327
T.F
F1
E,E1,Z AC220V, 50/60Hz
K AC240V, 50/60Hz
EVER +5.6V
Q331 REG
SYSTEM CONT ELECT. VR FUNCTION SW REMOTE CONT.
Q352 INV.
PIN8
CD CONT
POW CONT
GND
To CD PLAYER

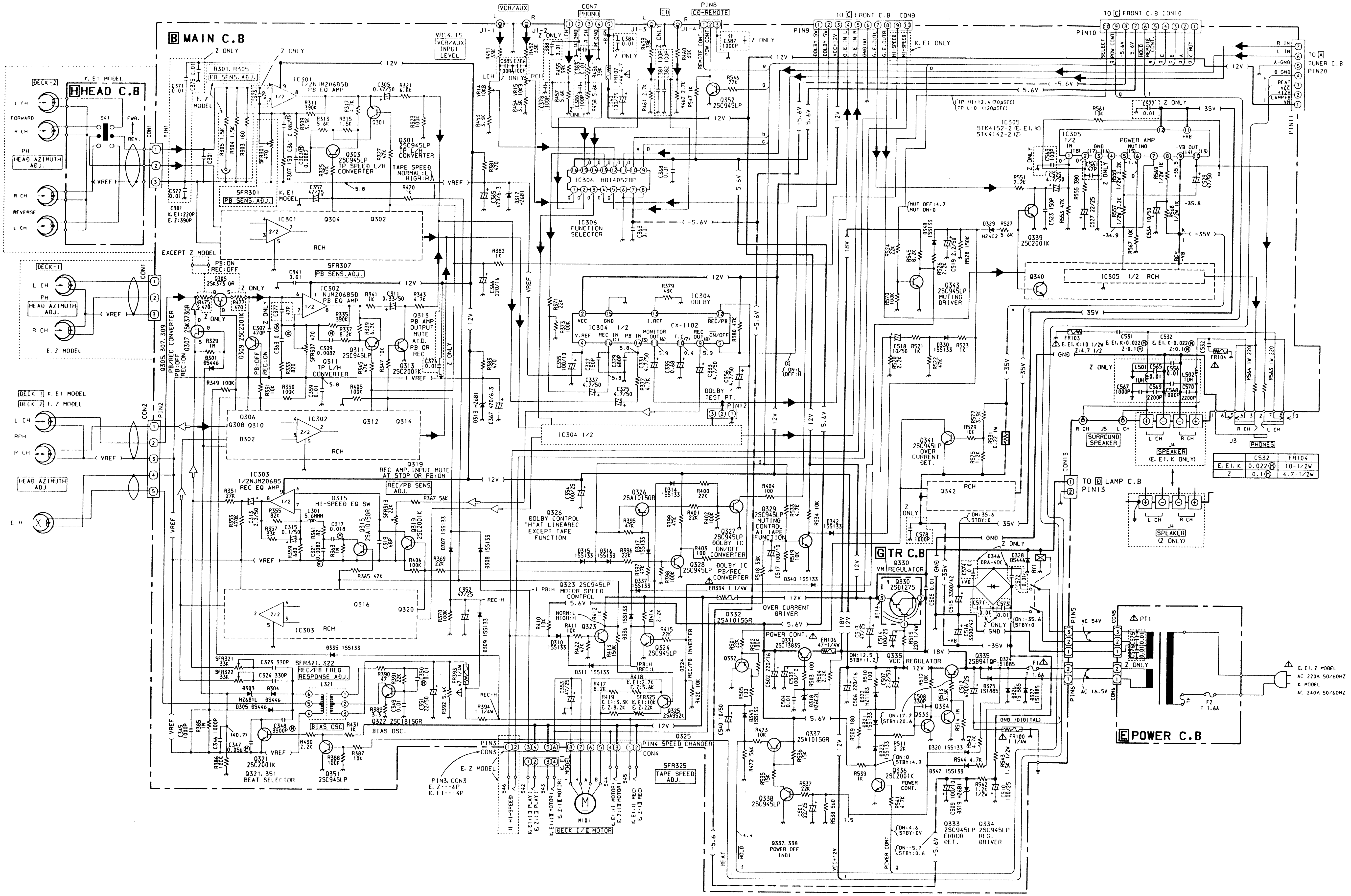
WIRING – 1


B MAIN C.B
To A TUNER C.B PIN20 VIA CON20
To C FRONT C.B CON10
To C FRONT C.B CON9
EXCEPT Z MODEL R475 ~ R478
J3 PHONES
CON13
CON7 PHONO (TO PLAYER)
VR14(LCH) VCR/AUX INPUT LEVEL VR15(RCH)
J1-1.1-2 VCR/AUX
Z ONLY
INPUT
J1-3.1-4 CD
PIN 8 CD REMOTE
J5 SURROUND SPEAKERS
J4 SPEAKERS
D LAMP C.B
To C FRONT C B
G TR C.B
Q330
IC301
IC303
IC304
IC305
IC306
TEST PIN PIN 12
H HEAD C.B
K.E.I MODELS
E.Z MODELS
M101 (MOTOR)
DECK 1,2
S44 DECK 1 (MOTOR)
S45 DECK 1 (REC)
S43 DECK2 (MOTOR)
S42 DECK 2 (PLAY)
DECK1 (EH)
DECK 1 (RP HEAD)
DECK 2 PB HEAD
S41-2
S41-1
S41 (DIRECTION) REV ←→ FWD
DECK 2 SHIELD
DECK 1 SHIELD
MECHA EARTH
CHASSIS EARTH
CON4
CON3
CON2
CON1
To B MAIN C.B PIN 4
To B MAIN C.B PIN 3
To B MAIN C.B PIN 2
To B MAIN C.B PIN 1
S45 DECK 2 (REC)
S43 DECK 1 (MOTOR)
S42 DECK 1 (PLAY)
S46 DECK 1 (HI-SPEED)
DECK 2 (EH)
DECK 2 (RP HEAD)
DECK 1 (PB HEAD)

WIRING — 1

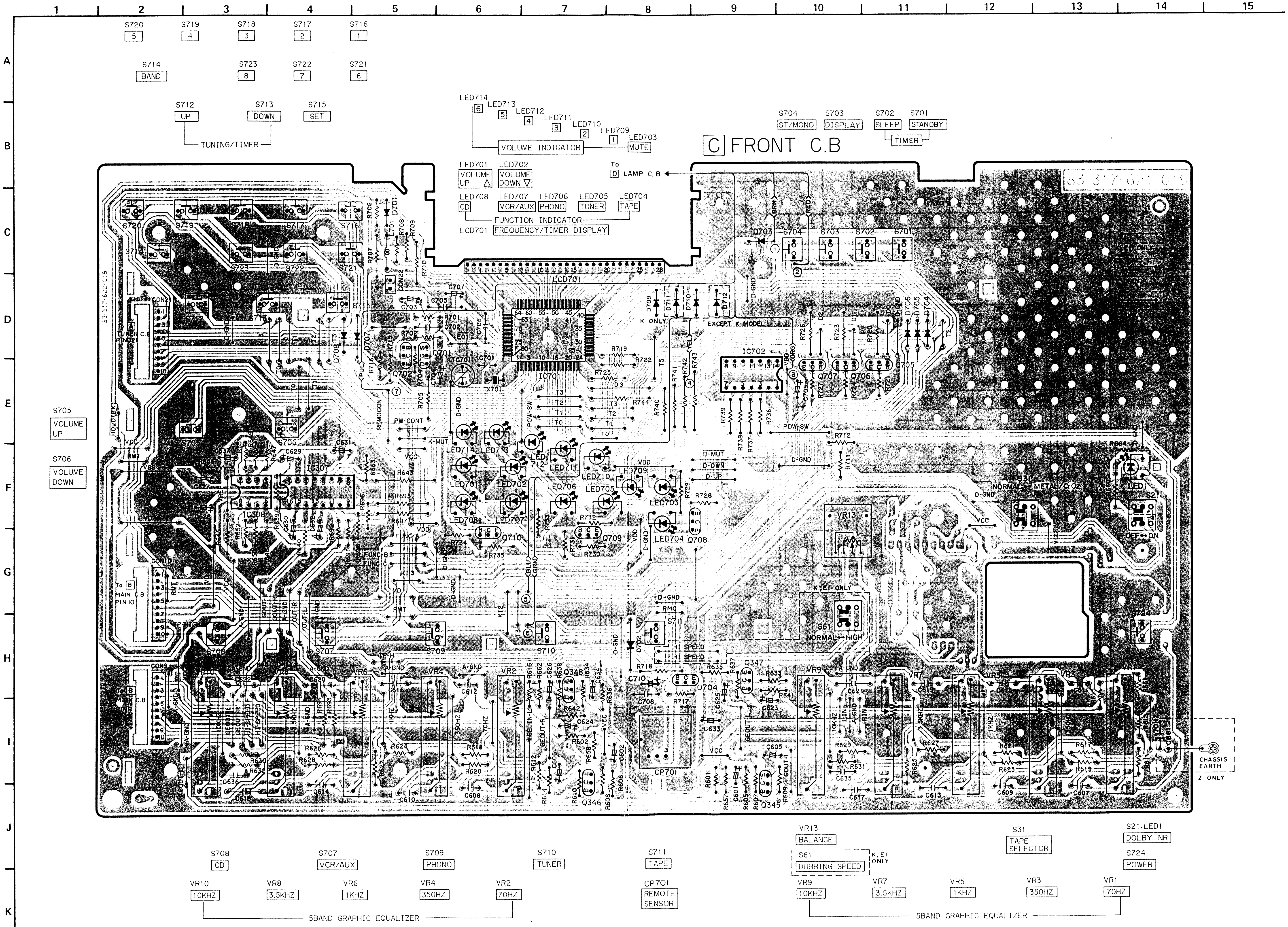

B MAIN C.B
To A TUNER C.B PIN20 VIA CON20
To C FRONT C.B CON10
To C FRONT C.B CON9
PIN10
PIN9
PIN 11
PIN 1
PIN2
PIN3
PIN4
PIN 6
PIN 5
PIN8
CON13
TEST PIN PIN 12
G L R
IC301
IC302
IC303
IC304
IC305
IC306
E.Z MODEL
K.EI MODEL
Z ONLY
Z MODEL
EXCEPT Z MODEL
R475 ~ R478
PB I CAL
REC CAL
BIAS CAL
K.EI MODEL (4P)
E.Z MODEL (6P)
K.EI ONLY
CON7
PHONO
(TO PLAYER)
VR14(LCH)
VCR/AUX INPUT LEVEL
VR15(RCH)
J1
J1-1.1-2
VCR/AUX
INPUT
J1-3.1-4
CD
To E POWER C.B CON6
To E POWER C.B CON5
PIN 8
CD REMOTE
RY1
F1
J5
SURROUND SPEAKERS
J4
SPEAKERS
J3
PHONES
D LAMP C.B
To C FRONT C.B
PLL
PL701
PL702
G TR C.B
Q330
H HEAD C.B
DECK 1,2
M101 (MOTOR)
S44 DECK 1 (MOTOR)
S45 DECK 1 (REC)
S43 DECK 2 (MOTOR)
S42 DECK 2 (PLAY)
DECK 1 (EH)
DECK 1 (RP HEAD)
DECK 2 PB HEAD
S41-2
S41-1
S41 (DIRECTION)
REV ←→ FWD
DECK 2 SHIELD
DECK 1 SHIELD
MECHA EARTH
CHASSIS EARTH
CON4
CON3
CON2
CON1
To B MAIN C.B PIN 4
To B MAIN C.B PIN 3
To B MAIN C.B PIN 2
To B MAIN C.B PIN 1
K.EI MODELS
E.Z MODELS
S44 DECK 2 (MOTOR)
S45 DECK 2 (REC)
S43 DECK 1 (MOTOR)
S42 DECK 1 (PLAY)
S46 DECK 1 (HI-SPEED)
DECK 2 (EH)
DECK 2 (RP HEAD)
DECK 1 (PB HEAD)
BLK
RED
ORG
GRN
GRY
WHT
BLU
YEL
BRN

SCHEMATIC DIAGRAM – 1



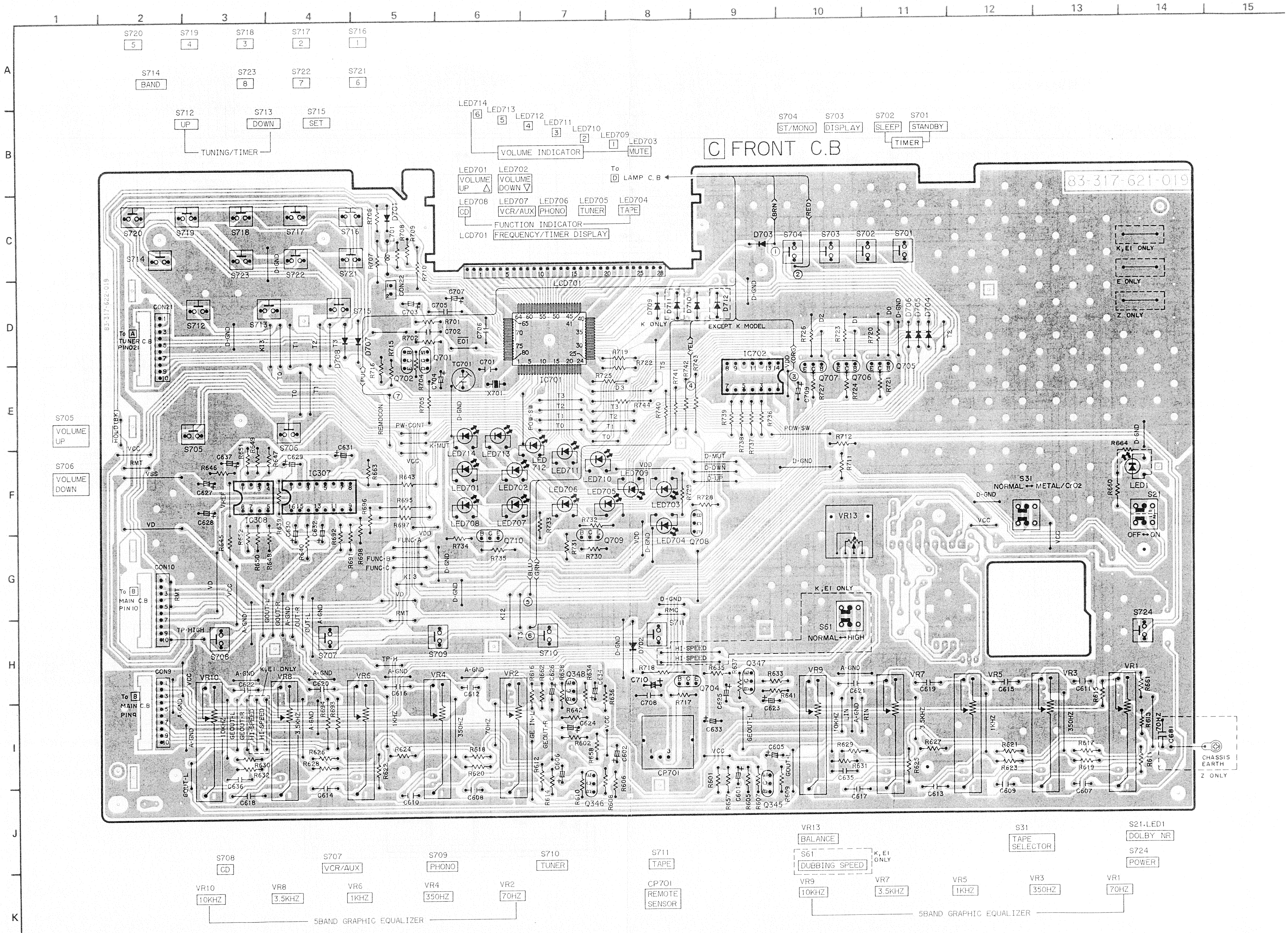
B MAIN C.B
H HEAD C.B
G TR C.B
E POWER C.B
DECK-2
DECK-1
FORWARD
REVERSE
L CH
R CH
PH
HEAD AZIMUTH ADJ.
VREF
CON1
CON2
CON3
CON4
CON5
CON6
CON7
CON13
VCR/AUX
VCR/AUX INPUT LEVEL
PHONO
CD
CD-REMOTE
PIN8
PIN9
PIN10
PIN11
PIN12
PIN13
TO C FRONT C.B CON9
TO C FRONT C.B CON10
TO A TUNER C.B PIN20
TO D LAMP C.B PIN13
K. E1 ONLY
Z ONLY
E. Z MODEL
K. E1 MODEL
EXCEPT Z MODEL
IC301 1/2 NJM2068SD PB EQ AMP
IC302 1/2 NJM2068SD PB EQ AMP
IC303 1/2 NJM2068S REC EQ AMP
IC304 1/2 CX-1102 DOLBY
IC305 STK4152-2 (E. E1. K) STK4142-2 (Z) POWER AMP
IC306 HD14052BP FUNCTION SELECTOR
Q301 2SC945LP TP L/H CONVERTER
Q303 2SC945LP TP SPEED L/H CONVERTER
Q305 2SK373 GR
Q307 2SK373GR
Q305, 307, 309 PB/REC CONVERTER PB:OFF REC:ON
Q309 2SC2001K
Q311 2SC945LP TP L/H CONVERTER
Q313 PB AMP OUTPUT MUTE AT II PB OR REC
Q315 2SA1015GR HI-SPEED EQ SW
Q319 REC AMP. INPUT MUTE AT STOP OR PB:ON
Q321, 351 BEAT SELECTOR
Q322 2SC1815GR BIAS OSC.
Q323 2SC945LP MOTOR SPEED CONTROL
Q324 2SC945LP
Q325 2SA952K REC/PB INVERTER
Q326 2SA1015GR DOLBY CONTROL "H" AT LINE&REC EXCEPT TAPE FUNCTION
Q327 2SC945LP DOLBY IC ON/OFF CONVERTER
Q328 2SC945LP DOLBY IC PB/REC CONVERTER
Q329 2SC945LP MUTING CONTROL AT TAPE FUNCTION
Q330 2SD1275 VM REGULATOR
Q331 2SC1383S POWER CONT.
Q332 2SA1015GR OVER CURRENT DRIVER
Q333 2SC945LP ERROR DET.
Q334 2SC945LP REG. DRIVER
Q335 2SB941QP VCC REGULATOR
Q336 2SC2001K POWER CONT.
Q337 2SA1015GR
Q337, 338 POWER OFF INDI
Q338 2SC945LP
Q339 2SC2001K
Q340
Q341 2SC945LP OVER CURRENT DET.
Q342
Q343 2SC945LP MUTING DRIVER
Q352 2SC945LP
SFR301 PB SENS. ADJ.
SFR307 PB SENS. ADJ.
REC/PB SENS ADJ.
SFR321, 322 REC/PB FREQ. RESPONSE ADJ.
BIAS OSC
SFR325 TAPE SPEED ADJ.
TAPE SPEED NORMAL:L HIGH:H
DOLBY TEST PT.
MUT OFF:4.7 MUT ON:0
TP H1:12.4 (70μSEC) TP L:0 (120μSEC)
12V
5.6V
-5.6V
18V
35V
-35V
GND
M101
DECK I/II MOTOR
HI-SPEED
PIN3, CON3 E. Z···6P K. E1···4P
SURROUND SPEAKER
SPEAKER (E. E1. K ONLY)
SPEAKER (Z ONLY)
PHONES
J3
J4
J5
PT1
AC 54V
AC 16.5V
F1 T 1.6A
F2 T 1.6A
E. E1. Z MODEL AC 220V. 50/60HZ
K MODEL AC 240V. 50/60HZ
GND (DIGITAL)
FR106 47-1/4W
FR100 1 1/4W
C532 FR104
E. E1. K 0.022Ⓜ 10-1/2W
Z 0.1Ⓜ 4.7-1/2W

WIRING – 2

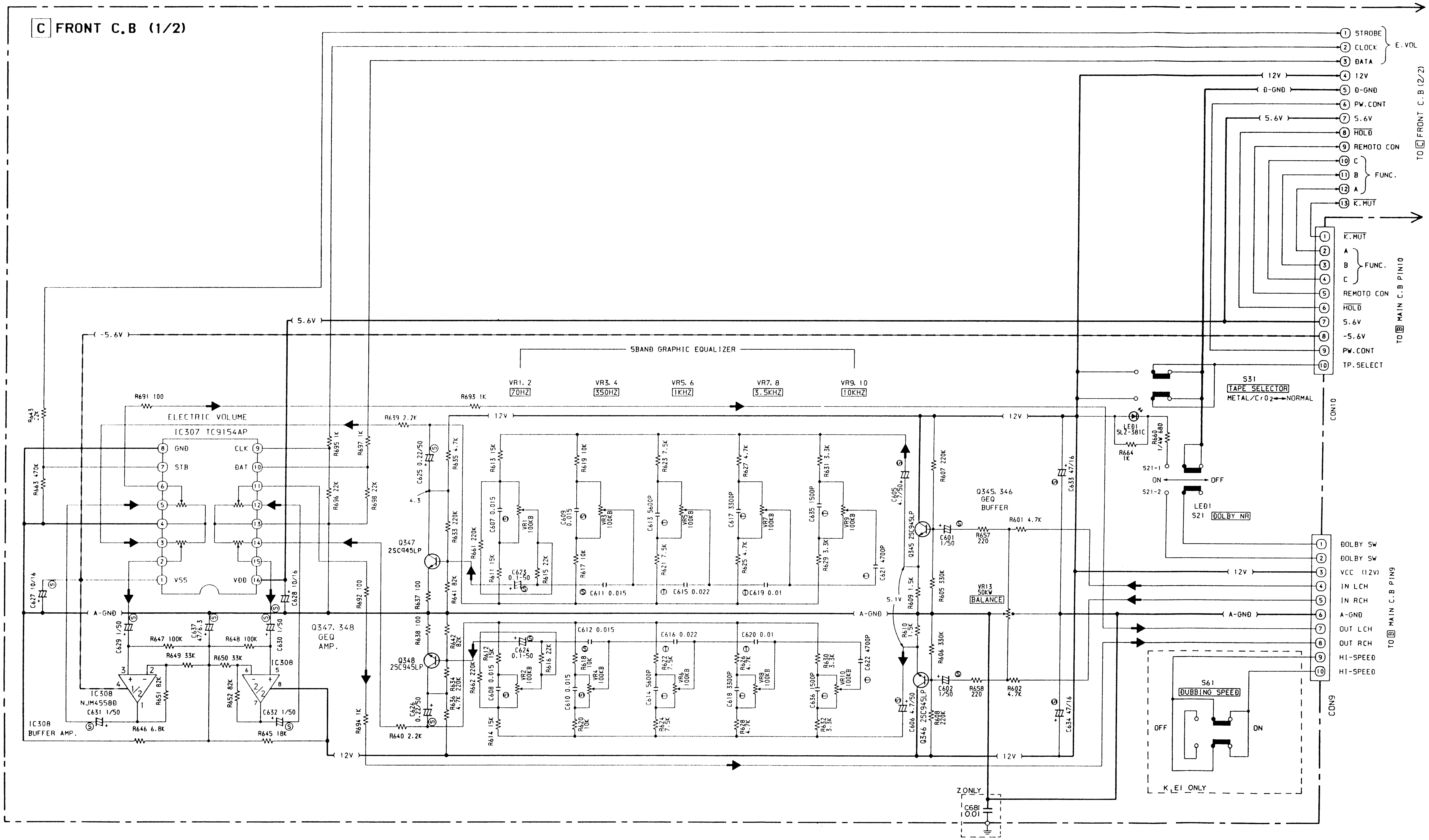


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J K
S720 5
S719 4
S718 3
S717 2
S716 1
S714 BAND
S723 8
S722 7
S721 6
S712 UP
S713 DOWN
S715 SET
TUNING/TIMER
LED714 6
LED713 5
LED712 4
LED711 3
LED710 2
LED709 1
LED703 MUTE
VOLUME INDICATOR
LED701 VOLUME UP △
LED702 VOLUME DOWN ▽
To D LAMP C.B
LED708 CD
LED707 VCR/AUX
LED706 PHONO
LED705 TUNER
LED704 TAPE
FUNCTION INDICATOR
LCD701 FREQUENCY/TIMER DISPLAY
C FRONT C.B
S704 ST/MONO
S703 DISPLAY
S702 SLEEP
S701 STANDBY
TIMER
S705 VOLUME UP
S706 VOLUME DOWN
To A TUNER C.B PIN 2
To B MAIN C.B PIN 10
IC701
IC702
LCD701
EXCEPT K MODEL
K ONLY
K, EI ONLY
NORMAL HIGH
NORMAL METAL CrO2
OFF ON
CHASSIS EARTH
Z ONLY
VR13 BALANCE
S61 DUBBING SPEED
K, EI ONLY
S31 TAPE SELECTOR
S21.LED1 DOLBY NR
S724 POWER
S708 CD
S707 VCR/AUX
S709 PHONO
S710 TUNER
S711 TAPE
CP701 REMOTE SENSOR
VR10 10KHZ
VR8 3.5KHZ
VR6 1KHZ
VR4 350HZ
VR2 70HZ
5BAND GRAPHIC EQUALIZER
VR9 10KHZ
VR7 3.5KHZ
VR5 1KHZ
VR3 350HZ
VR1 70HZ
5BAND GRAPHIC EQUALIZER

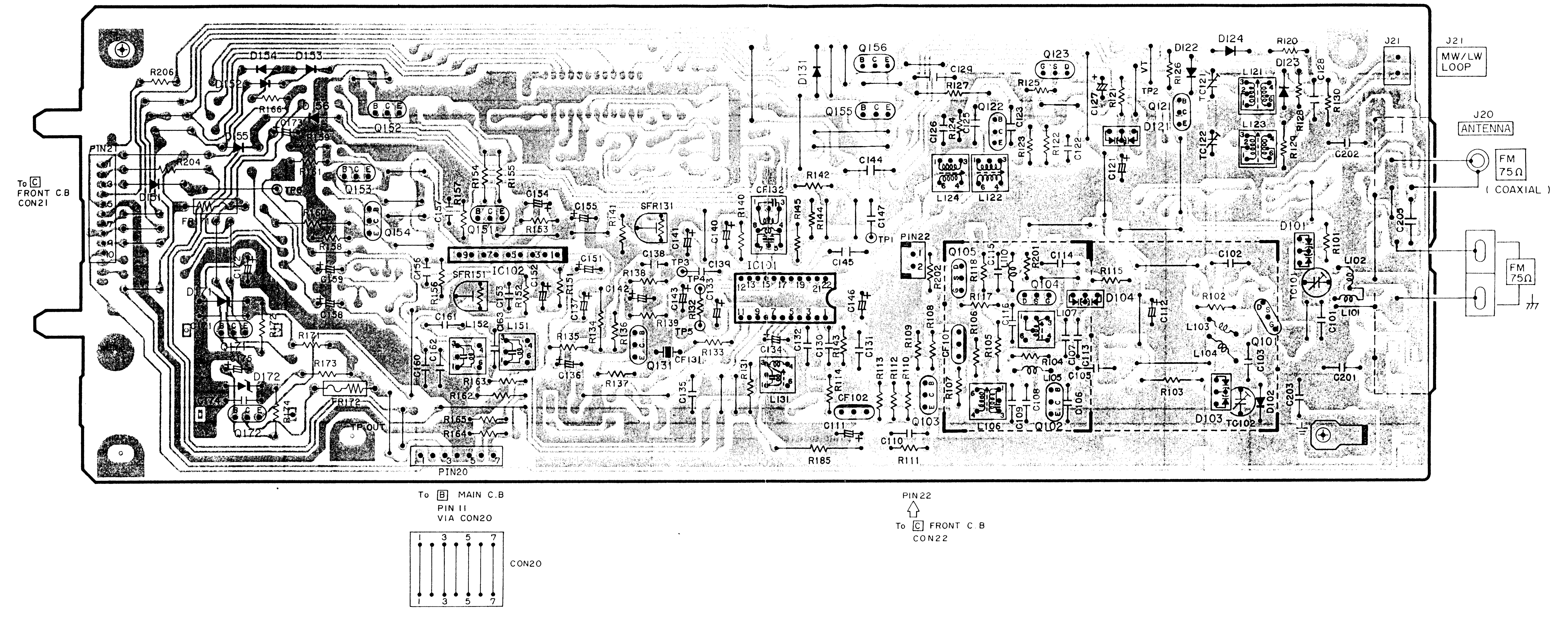
WIRING – 2


C FRONT C.B
83-317-621-019
83-317-622-019
S720 5
S719 4
S718 3
S717 2
S716 1
S714 BAND
S723 8
S722 7
S721 6
S712 UP
S713 DOWN
S715 SET
TUNING/TIMER
LED714 6
LED713 5
LED712 4
LED711 3
LED710 2
LED709 1
LED703 MUTE
VOLUME INDICATOR
LED701 VOLUME UP △
LED702 VOLUME DOWN ▽
LED708 CD
LED707 VCR/AUX
LED706 PHONO
LED705 TUNER
LED704 TAPE
FUNCTION INDICATOR
LCD701 FREQUENCY/TIMER DISPLAY
To D LAMP C.B
S704 ST/MONO
S703 DISPLAY
S702 SLEEP
S701 STANDBY
TIMER
S705 VOLUME UP
S706 VOLUME DOWN
To A TUNER C.B PIN021
To B MAIN C.B PIN10
To B MAIN C.B PIN9
CON21
CON10
CON9
CON22
IC701
IC702
IC307
IC308
LCD701
K, EI ONLY
E ONLY
Z ONLY
K ONLY
EXCEPT K MODEL
S31 NORMAL ↔ METAL/CrO2
S21 OFF ↔ ON
S61 NORMAL ↔ HIGH
VR13
S724
CHASSIS EARTH
Z ONLY
BRN
RED
YEL
ORG
BLU
GRN
HOLD(BK)
D-GND
A-GND
VCC
VDD
VD
RMT
TP-HIGH
TP-H
HI-SPEED
POW-SW
PW-CONT
REMOCON
K-MUT
FUNC-A
FUNC-B
FUNC-C
D-MUT
D-DWN
D-UP
RMC
VR10 10KHZ
VR8 3.5KHZ
VR6 1KHZ
VR4 350HZ
VR2 70HZ
VR9 10KHZ
VR7 3.5KHZ
VR5 1KHZ
VR3 350HZ
VR1 70HZ
CP701
S708 CD
S707 VCR/AUX
S709 PHONO
S710 TUNER
S711 TAPE
CP701 REMOTE SENSOR
VR13 BALANCE
S61 DUBBING SPEED
K, EI ONLY
S31 TAPE SELECTOR
S21.LED1 DOLBY NR
S724 POWER
5BAND GRAPHIC EQUALIZER
5BAND GRAPHIC EQUALIZER
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
K

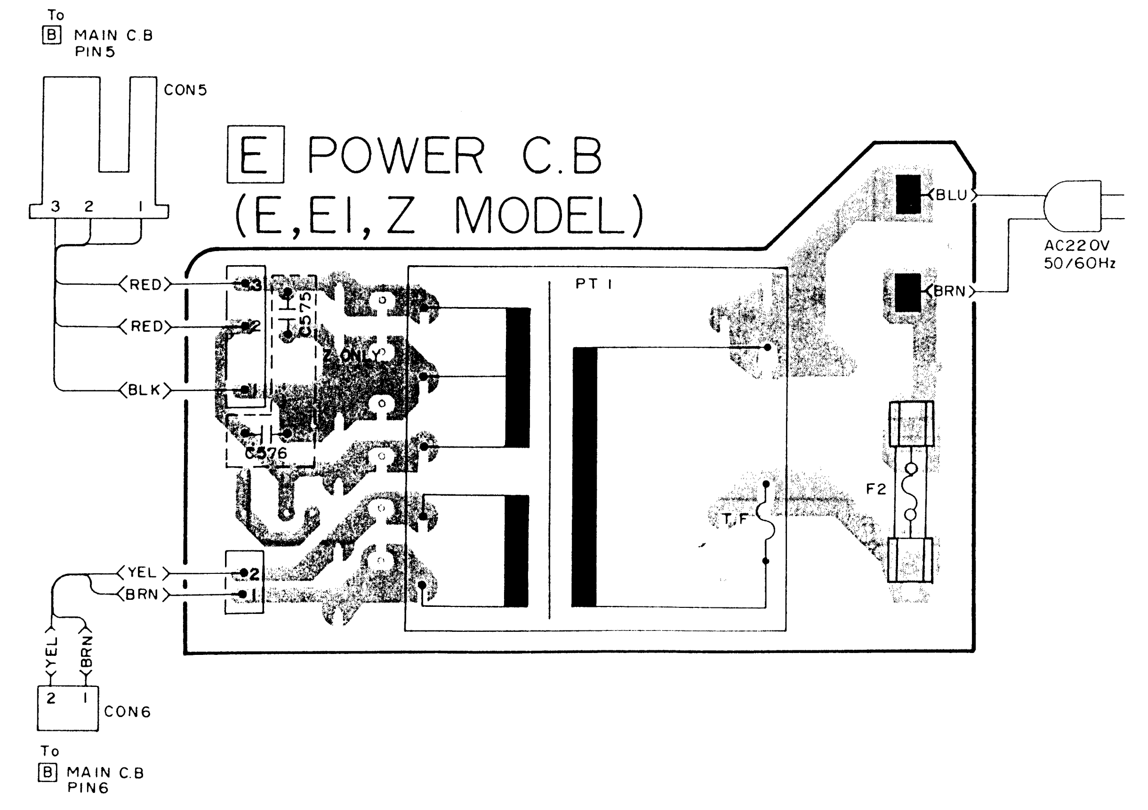
SCHEMATIC DIAGRAM – 2


C FRONT C.B (1/2)
STROBE
CLOCK
DATA
E.VOL
12V
D-GND
PW.CONT
5.6V
HOLD
REMOTO CON
C
B
A
FUNC.
K.MUT
TO C FRONT C.B (2/2)
K.MUT
A
B
C
FUNC.
REMOTO CON
HOLD
5.6V
-5.6V
PW.CONT
TP.SELECT
TO B MAIN C.B PIN10
CON10
5.6V
-5.6V
5BAND GRAPHIC EQUALIZER
VR1, 2
70HZ
VR3, 4
350HZ
VR5, 6
1KHZ
VR7, 8
3.5KHZ
VR9, 10
10KHZ
ELECTRIC VOLUME
IC307 TC9154AP
GND
STB
CLK
DAT
VSS
VDD
R691 100
R693 1K
R639 2.2K
12V
A-GND
Q347
2SC945LP
Q348
2SC945LP
Q347, 348
GEQ
AMP.
IC308
NJM4558D
IC308
BUFFER AMP.
R647 100K
R648 100K
R649 33K
R650 33K
R651 82K
R652 82K
R646 6.8K
R645 18K
C631 1/50
C632 1/50
C629 1/50
C630 1/50
C627 10/16
C628 10/16
R663 470K
R643 22K
R695 1K
R697 1K
R696 22K
R698 22K
R692 100
R694 1K
R640 2.2K
R637 100
R638 100
C625 0.22/50
C626 0.22/50
R635 4.7K
R633 220K
R641 82K
R642 82K
R661 220K
R662 220K
R613 15K
R611 15K
R612 15K
R614 15K
C623 0.1-50
C624 0.1-50
R615 22K
R616 22K
C607 0.015
C608 0.015
VR1 100KB
VR2 100KB
C609 0.015
C610 0.015
VR3 100KB
VR4 100KB
R619 10K
R617 10K
R618 10K
R620 10K
C611 0.015
C612 0.015
R623 7.5K
R621 7.5K
R622 7.5K
R624 7.5K
C613 5600P
C614 5600P
VR5 100KB
VR6 100KB
C615 0.022
C616 0.022
R627 4.7K
R625 4.7K
R626 4.7K
R628 4.7K
C617 3300P
C618 3300P
VR7 100KB
VR8 100KB
C619 0.01
C620 0.01
R631 3.3K
R629 3.3K
R630 3.3K
R632 3.3K
C635 1500P
C636 1500P
VR9 100KB
VR10 100KB
C621 4700P
C622 4700P
C605 4.7/50
C606 4.7/50
R609 1.5K
R610 1.5K
5.1V
Q345
2SC945LP
Q346
2SC945LP
Q345, 346
GEQ
BUFFER
R607 220K
R605 330K
R606 330K
R608 220K
C601 1/50
C602 1/50
R657 220
R658 220
R601 4.7K
R602 4.7K
VR13
50KW
BALANCE
C633 47/16
C634 47/16
LED1
SL2-381C
R664 1K
R660 680 1/4W
S21-1
S21-2
ON
OFF
LED1
S21 DOLBY NR
S31
TAPE SELECTOR
METAL/CrO2 ⟷ NORMAL
DOLBY SW
DOLBY SW
VCC (12V)
IN LCH
IN RCH
A-GND
OUT LCH
OUT RCH
HI-SPEED
HI-SPEED
TO B MAIN C.B PIN9
CON9
S61
DUBBING SPEED
OFF
ON
K,EI ONLY
Z ONLY
C681 0.01

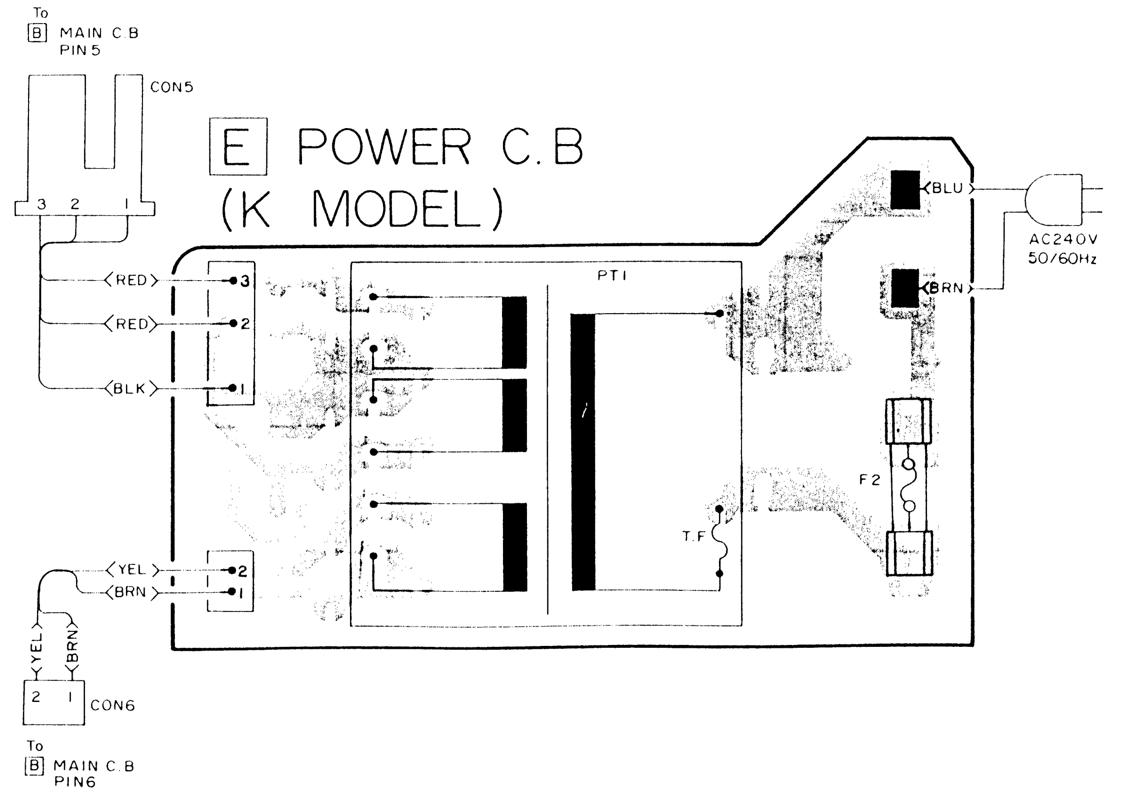
A TUNER C.B (E,EI,K MODEL)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
To C FRONT C.B CON21
PIN21
R206
D154
D153
D152
R166
D155
D156
Q173
R204
D151
FB171
TP5
R161
Q153
R160
Q154
R158
C159
C158
D171
Q171
R171
R173
D172
FR172
Q172
R174
TP OUT
Q152
R157
R154
R155
C157
Q151
C154
C155
R153
R141
SFR131
C156
C161
L152
IC102
SFR151
C153
C152
R152
R151
C151
C163
L151
C162
C160
R163
R162
R165
R164
PIN20
C137
R134
R135
C136
R137
R136
C142
R138
C138
TP3
C139
TP4
C141
C143
R132
C133
R139
TP5
Q131
CF131
R133
C135
R131
R140
C140
CF132
IC101
R145
R144
R142
C144
C147
TP1
C145
C146
C134
L131
C132
C130
R143
C131
R114
CF102
C111
R185
R113
R112
R110
C110
R111
Q103
D131
Q156
Q155
C129
R127
Q123
R125
C126
R124
C125
Q122
C123
R123
R122
C122
L124
L122
C127
R121
TP2
VT
D122
R126
Q121
D121
C121
D124
R120
D123
TC121
TC122
L121
L123
R128
R129
C128
R130
C202
J21
J21 MW/LW LOOP
J20 ANTENNA
FM 75Ω
(COAXIAL)
PIN22
Q105
R202
R118
C115
L110
R201
C114
R115
C102
D101
R101
Q104
C112
R117
D104
R102
TC101
L102
R108
R109
R106
C116
L107
L103
L101
C101
C205
CF101
R105
C107
C113
R104
L104
Q101
C103
R107
L105
C105
R103
C201
L106
C109
C108
D106
Q102
D103
TC102
D102
C203
FM 75Ω
To B MAIN C.B PIN 11 VIA CON20
CON20
1 3 5 7
PIN22
To C FRONT C.B CON22

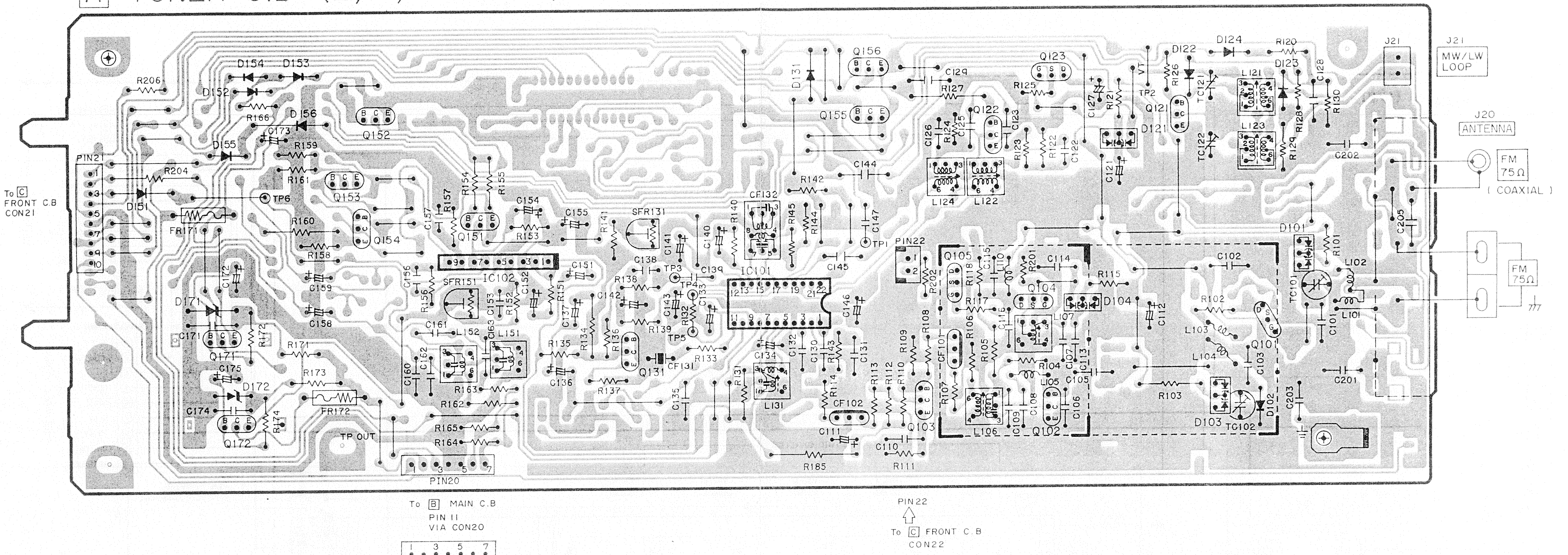
E POWER C.B (E,EI,Z MODEL)

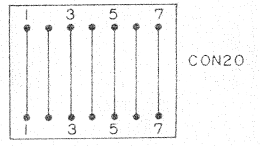

G
H
I
J
K
To B MAIN C.B PIN5
CON5
3 2 1
RED
RED
BLK
C575
Z ONLY
C576
PT1
BLU
BRN
AC220V 50/60Hz
F2
T.F
YEL
BRN
YEL
BRN
2 1
CON6
To B MAIN C.B PIN6

E POWER C.B (K MODEL)

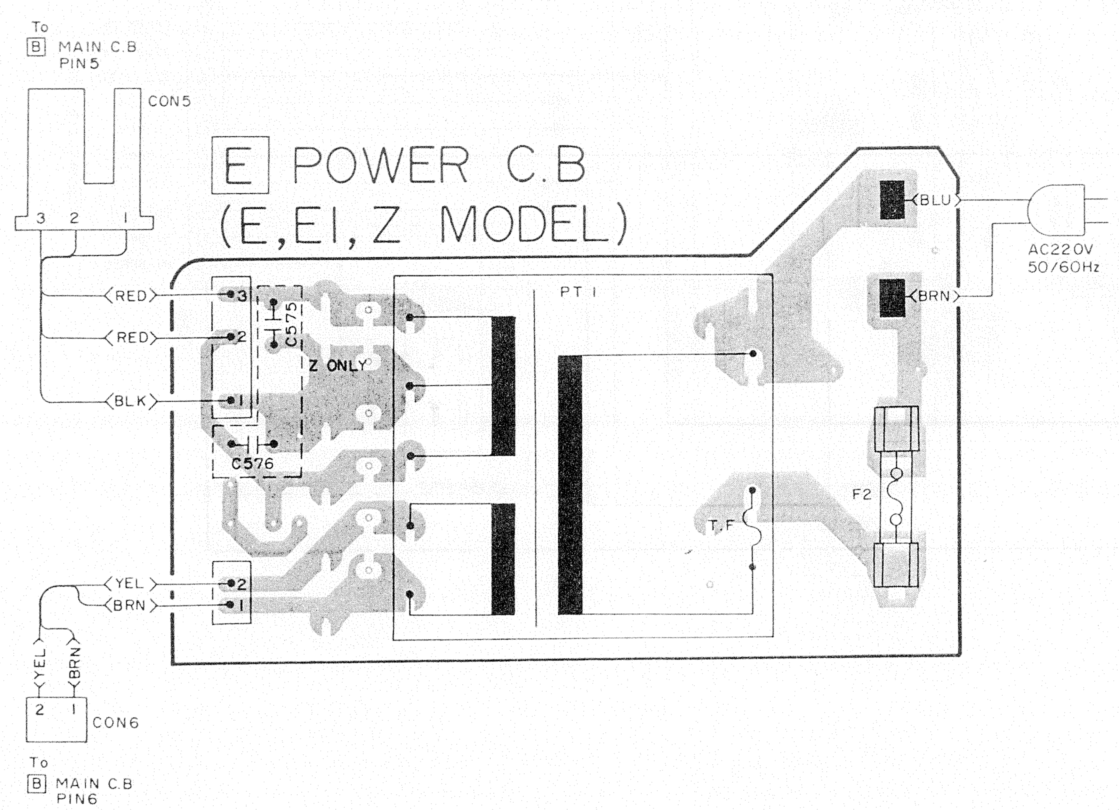

To B MAIN C.B PIN5
CON5
3 2 1
RED
RED
BLK
PT1
BLU
BRN
AC240V 50/60Hz
F2
T.F
YEL
BRN
YEL
BRN
2 1
CON6
To B MAIN C.B PIN6

A TUNER C.B (E,EI,K MODEL)

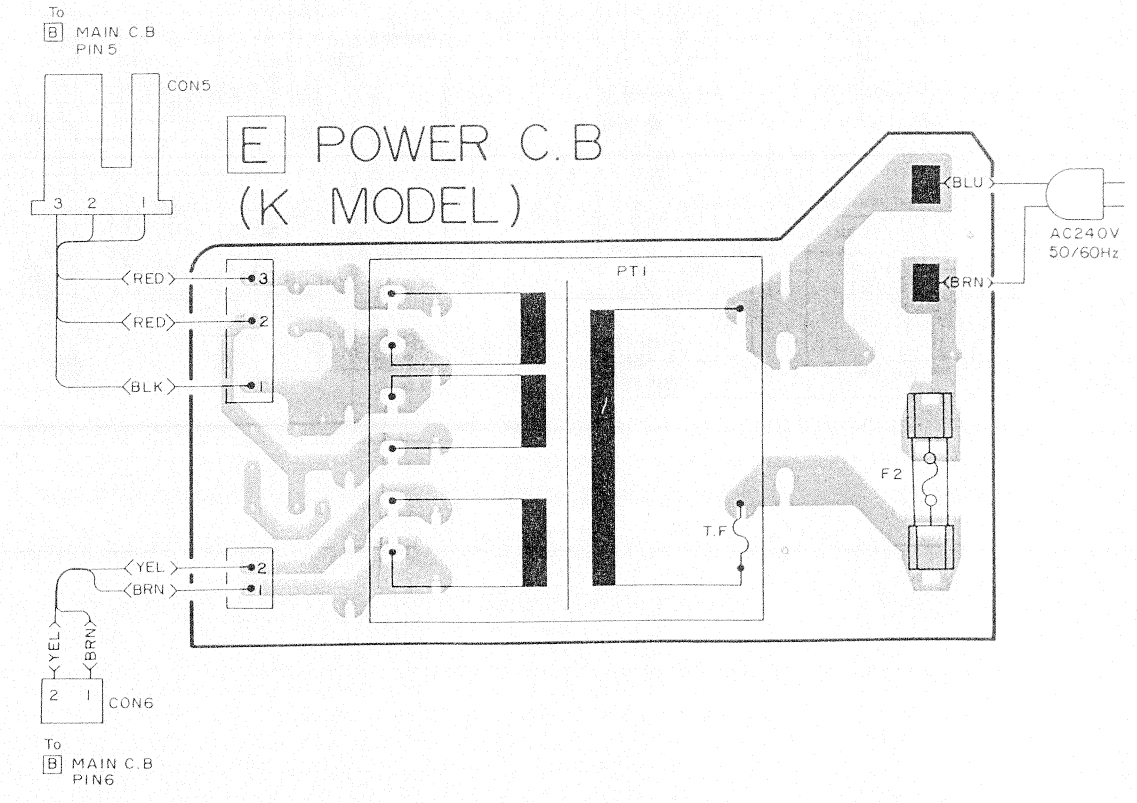

To C FRONT C.B CON21
PIN21
J21
MW/LW LOOP
J20
ANTENNA
FM 75Ω
(COAXIAL)
FM 75Ω
IC101
IC102
PIN20
PIN22
TP OUT
TP1
TP2
TP3
TP4
TP5
TP6
To B MAIN C.B PIN 11 VIA CON20
PIN22
To C FRONT C.B CON22


1
3
5
7
CON20
1
3
5
7

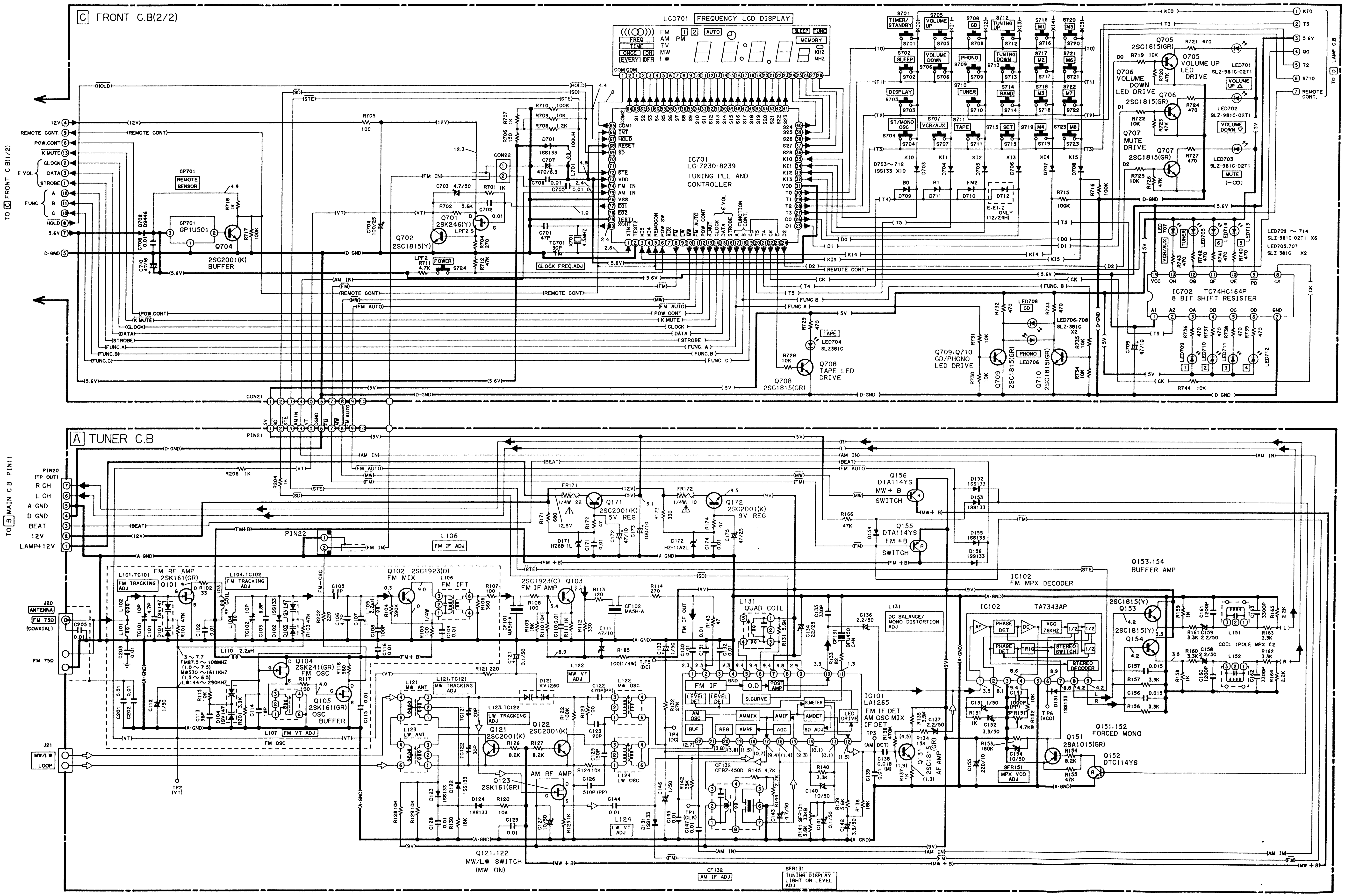
E POWER C.B (E,EI,Z MODEL)


To
B MAIN C.B
PIN5
CON5
3
2
1
RED
RED
BLK
C575
Z ONLY
C576
PT1
BLU
BRN
AC220V
50/60Hz
F2
T.F
YEL
BRN
YEL
BRN
2
1
CON6
To
B MAIN C.B
PIN6

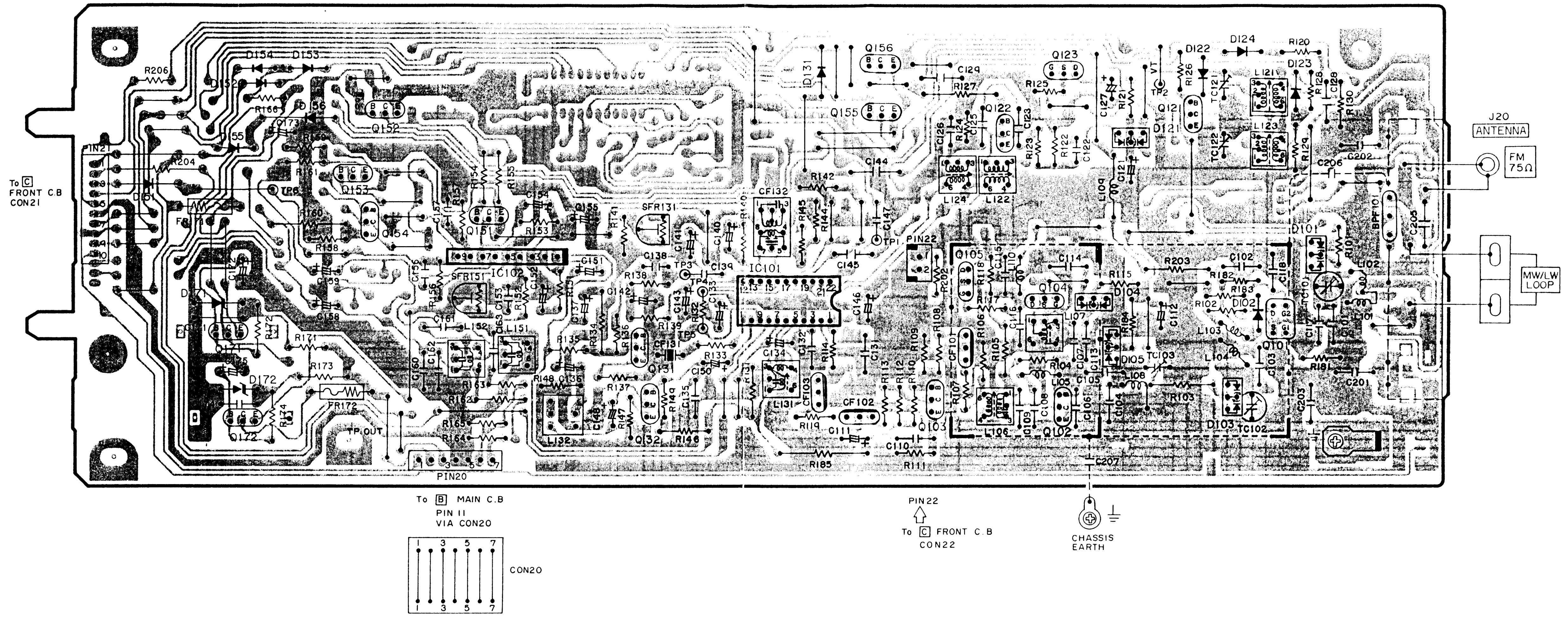
E POWER C.B (K MODEL)


To
B MAIN C.B
PIN5
CON5
3
2
1
RED
RED
BLK
PT1
BLU
BRN
AC240V
50/60Hz
F2
T.F
YEL
BRN
YEL
BRN
2
1
CON6
To
B MAIN C.B
PIN6

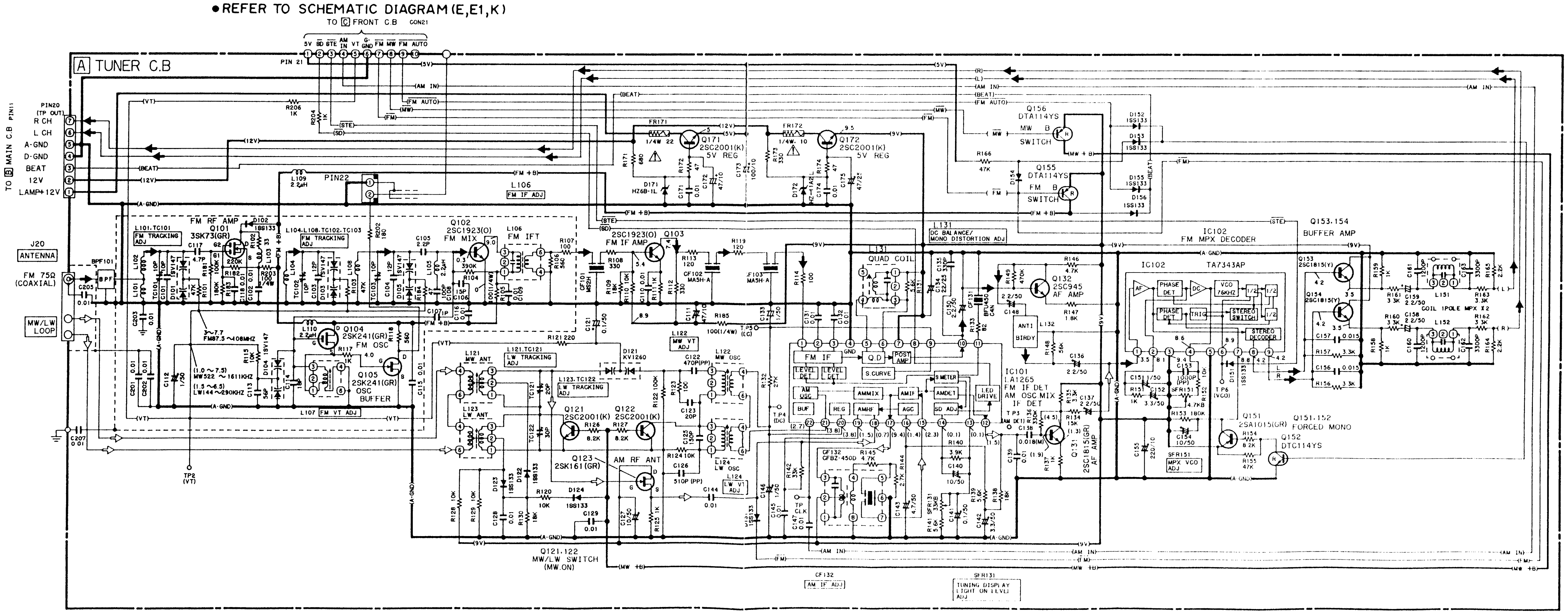
SCHEMATIC DIAGRAM – 3 (E,EI,K)


C FRONT C.B(2/2)
LCD701 FREQUENCY LCD DISPLAY
IC701 LC-7230-8239 TUNING PLL AND CONTROLLER
TO C FRONT C.B(1/2)
CP701 GP1U501 REMOTE SENSOR
Q704 2SC2001(K) BUFFER
Q701 2SK246(Y)
Q702 2SC1815(Y)
CLOCK FREQ.ADJ
Q705 2SC1815(GR) VOLUME UP LED DRIVE
Q706 VOLUME DOWN LED DRIVE 2SC1815(GR)
Q707 MUTE DRIVE 2SC1815(GR)
IC702 TC74HC164P 8 BIT SHIFT RESISTER
Q708 TAPE LED DRIVE 2SC1815(GR)
Q709,Q710 CD/PHONO LED DRIVE
LED709 ~ 714 SLZ-981C-02T1 X6
LED705,707 SLZ-381C X2
TO D LAMP C.B
CON21
PIN21
A TUNER C.B
TO B MAIN C.B PIN11
PIN20 (TP OUT)
Q171 2SC2001(K) 5V REG
Q172 2SC2001(K) 9V REG
Q156 DTA114YS MW+B SWITCH
Q155 DTA114YS FM+B SWITCH
L106 FM IF ADJ
FM RF AMP 2SK161(GR) Q101
Q102 2SC1923(O) FM MIX
2SC1923(O) Q103 FM IF AMP
Q104 2SK241(GR) FM OSC
Q105 2SK161(GR) OSC BUFFER
L107 FM VT ADJ
Q121 2SC2001(K)
Q122 2SC2001(K)
Q123 2SK161(GR) AM RF AMP
Q121,122 MW/LW SWITCH (MW ON)
L122 MW VT ADJ
L124 LW VT ADJ
L131 QUAD COIL
IC101 LA1265 FM IF DET AM OSC MIX IF DET
Q131 2SC1815(GR) AF AMP
IC102 FM MPX DECODER
IC102 TA7343AP
Q153,154 BUFFER AMP
2SC1815(Y) Q153
2SC1815(Y) Q154
Q151,152 FORCED MONO
Q151 2SA1015(GR)
Q152 DTC114YS
L131 DC BALANCE/MONO DISTORTION ADJ
CF132 AM IF ADJ
SFR131 TUNING DISPLAY LIGHT ON LEVEL ADJ
SFR151 MPX VCO ADJ
J20 ANTENNA FM 75Ω (COAXIAL)
J21 MW/LW LOOP

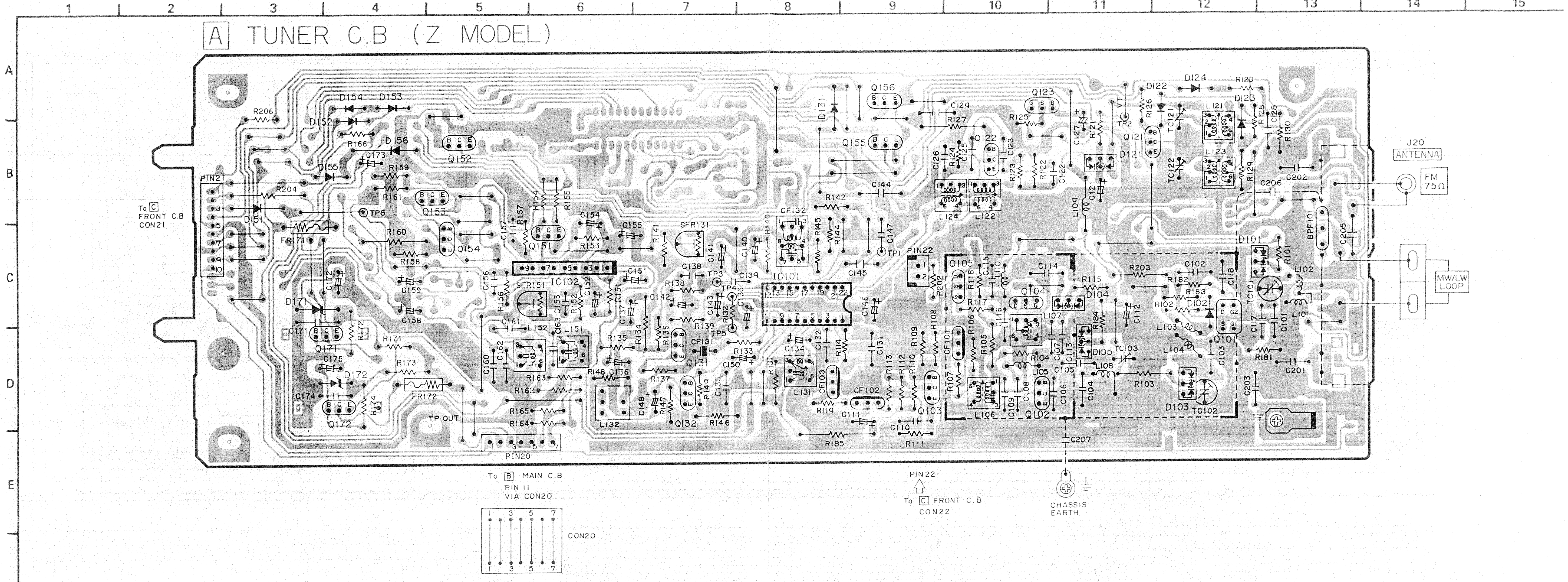
A TUNER C.B (Z MODEL)


To C FRONT C.B CON21
PIN21
PIN20
To B MAIN C.B PIN 11 VIA CON20
CON20
PIN22
To C FRONT C.B CON22
CHASSIS EARTH
J20 ANTENNA
FM 75Ω
MW/LW LOOP
IC101
IC102
SFR131
SFR151
CF101
CF102
CF103
CF132
TP1
TP2
TP3
TP4
TP5
TP6
TP OUT

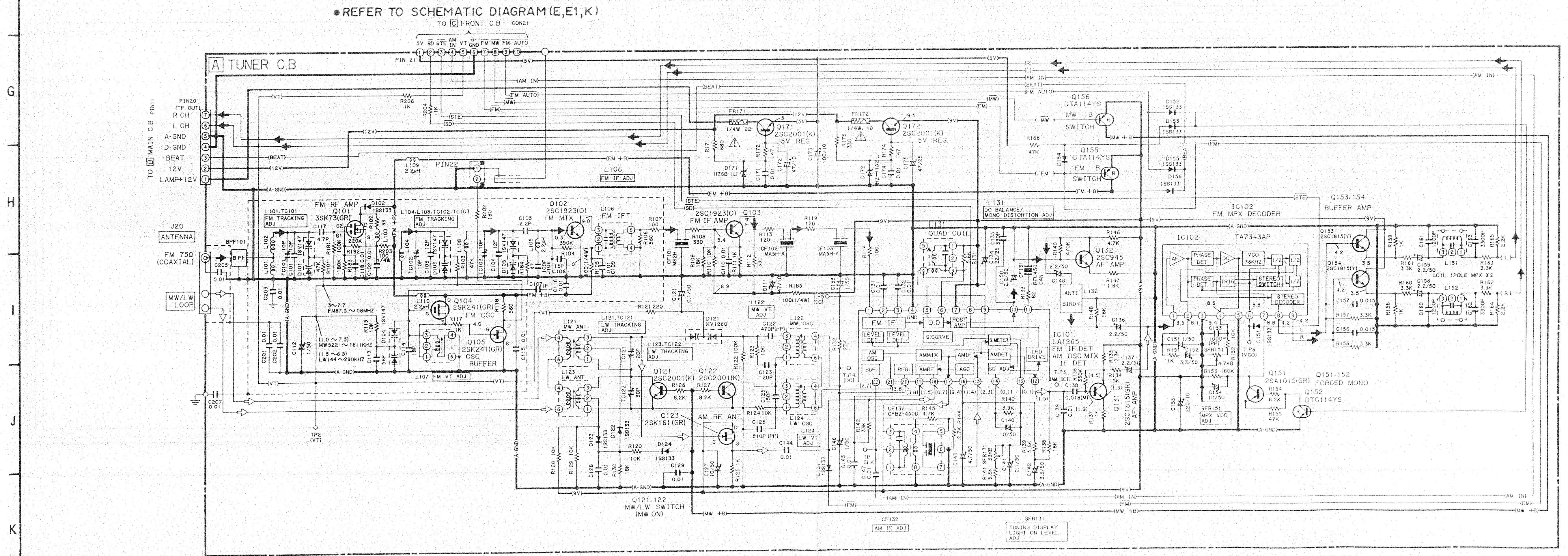
●REFER TO SCHEMATIC DIAGRAM (E,E1,K)


A TUNER C.B
TO C FRONT C.B CON21
PIN 21
5V BD STE AM IN VT G-GND FM MW FM AUTO
TO B MAIN C.B PIN11
PIN20 (TP OUT)
R CH
L CH
A-GND
D-GND
BEAT
12V
LAMP+12V
J20 ANTENNA
FM 75Ω (COAXIAL)
MW/LW LOOP
FM RF AMP Q101 3SK73(GR)
L101,TC101 FM TRACKING ADJ
L104,L108,TC102,TC103 FM TRACKING ADJ
Q102 2SC1923(O) FM MIX
L106 FM IFT
L106 FM IF ADJ
2SC1923(O) Q103 FM IF AMP
Q104 2SK241(GR) FM OSC
Q105 2SK241(GR) OSC BUFFER
L107 FM VT ADJ
FR171 1/4W 22
Q171 2SC2001(K) 5V REG
FR172 1/4W 10
Q172 2SC2001(K) 5V REG
D171 HZ6B-1L
L121,TC121 MW ANT
L121,TC121 LW TRACKING ADJ
L123,TC122 LW TRACKING ADJ
L123 LW ANT
D121 KV1260
L122 MW VT ADJ
L122 MW OSC
L124 LW OSC
L124 LW VT ADJ
Q121 2SC2001(K)
Q122 2SC2001(K)
Q123 2SK161(GR) AM RF ANT
Q121-122 MW/LW SWITCH (MW:ON)
L131 DC BALANCE/ MONO DISTORTION ADJ
L131 QUAD COIL
IC101 LA1265 FM IF DET AM OSC MIX IF DET
FM IF
LEVEL DET
Q.D
POST AMP
S CURVE
S METER
AMMIX
AMIF
AGC
AMDET
SD ADJ
LED DRIVE
BUF
REG
AMOSC
CF132 SFG.450D
Q132 2SC945 AF AMP
ANTI BIRDY
Q131 2SC1815(GR) AF AMP
IC102 FM MPX DECODER
IC102 TA7343AP
PHASE DET
VCO 76KHZ
STEREO SWITCH
STEREO DECODER
Q153·154 BUFFER AMP
Q153 2SC1815(Y)
Q154 2SC1815(Y)
L151 COIL 1POLE MPX X2
L152
SFR151 MPX VCO ADJ
Q151 2SA1015(GR)
Q151·152 FORCED MONO
Q152 DTC114YS
Q156 DTA114YS MW B SWITCH
Q155 DTA114YS FM B SWITCH
D152 1SS133
D153 1SS133
D155 1SS133
D156 1SS133
CF132 AM IF ADJ
SFR131 TUNING DISPLAY LIGHT ON LEVEL ADJ
(5V)
(12V)
(9V)
(A-GND)
(AM IN)
(BEAT)
(FM AUTO)
(MW)
(FM)
(STE)
(SD)
(VT)
(R)
(L)
(FM +B)
(MW +B)

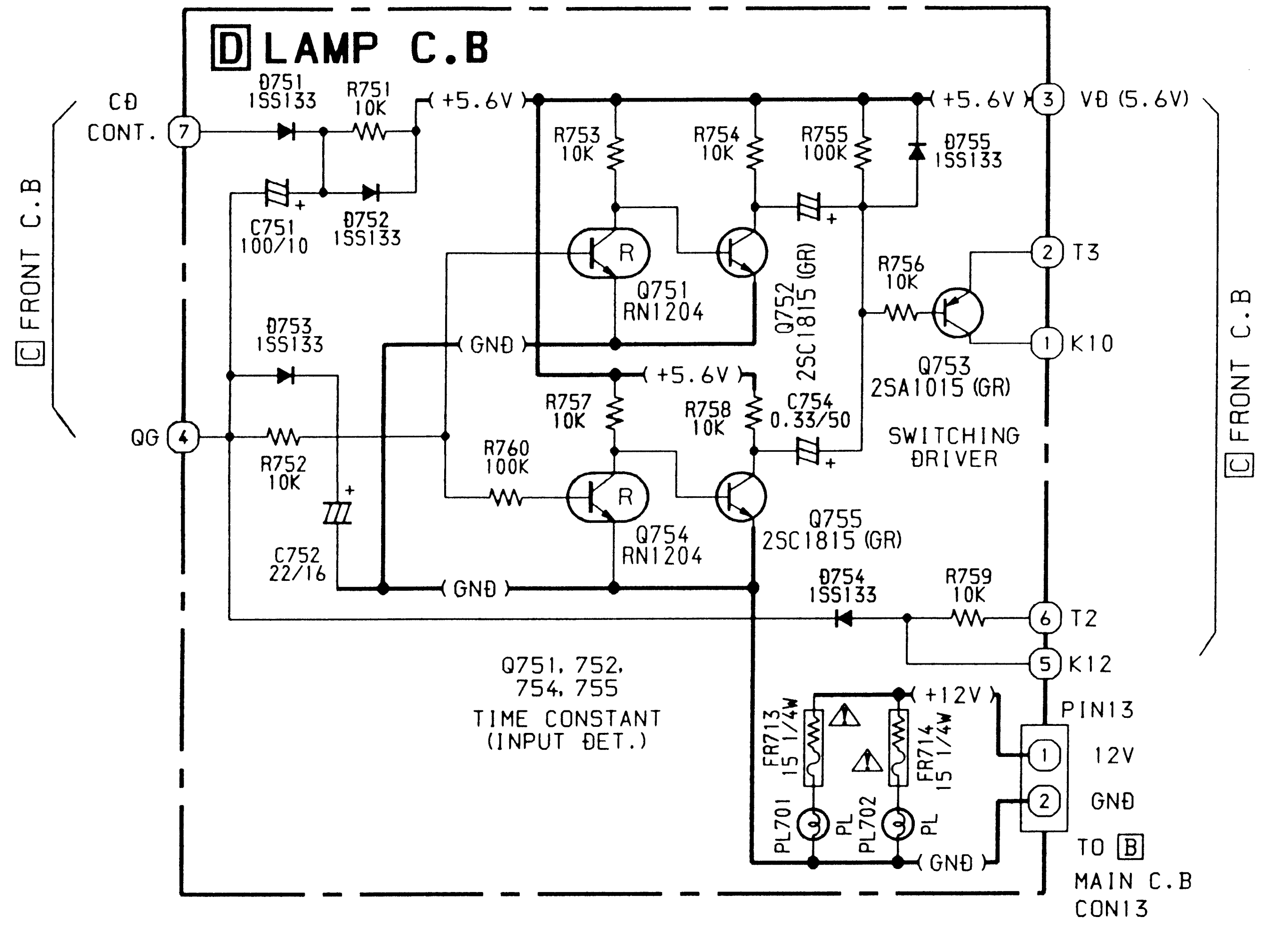
A TUNER C.B (Z MODEL)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
PIN21
To C FRONT C.B CON21
PIN20
To B MAIN C.B PIN 11 VIA CON20
CON20
PIN22
To C FRONT C.B CON22
CHASSIS EARTH
J20 ANTENNA
FM 75Ω
MW/LW LOOP
TP OUT
TP1
TP3
TP4
TP5
TP6
IC101
IC102
Q151
Q152
Q153
Q154
Q155
Q156
Q121
Q122
Q123
Q131
Q132
Q101
Q102
Q103
Q104
Q105
Q171
Q172
SFR131
SFR151
CF131
CF132
CF102
BPF101
FR171
FR172

● REFER TO SCHEMATIC DIAGRAM (E,E1,K)


F
G
H
I
J
K
A TUNER C.B
TO C FRONT C.B CON21
PIN 21
5V SD STE AM IN VT GND FM MW FM AUTO
PIN20 (TP OUT)
R CH
L CH
A-GND
D-GND
BEAT
12V
LAMP+12V
TO B MAIN C.B PIN11
J20 ANTENNA
FM 75Ω (COAXIAL)
MW/LW LOOP
FM RF AMP Q101 3SK73(GR)
Q102 2SC1923(O) FM MIX
L106 FM IFT
2SC1923(O) Q103 FM IF AMP
Q104 2SK241(GR) FM OSC
Q105 2SK241(GR) OSC BUFFER
L101,TC101 FM TRACKING ADJ
L104,L108,TC102,TC103 FM TRACKING ADJ
L107 FM VT ADJ
L106 FM IF ADJ
Q171 2SC2001(K) 5V REG
Q172 2SC2001(K) 5V REG
Q156 DTA114YS MW B SWITCH
Q155 DTA114YS FM B SWITCH
L131 DC BALANCE/ MONO DISTORTION ADJ
QUAD COIL
IC101 LA1265 FM IF DET AM OSC.MIX IF DET
Q132 2SC945 AF AMP
Q131 2SC1815(GR) AF AMP
IC102 FM MPX DECODER
IC102 TA7343AP
Q153·154 BUFFER AMP
Q153 2SC1815(Y)
Q154 2SC1815(Y)
COIL 1POLE MPX ×2
Q151 2SA1015(GR)
Q151·152 FORCED MONO
Q152 DTC114YS
SFR151 MPX VCO ADJ
Q121 2SC2001(K)
Q122 2SC2001(K)
Q121·122 MW/LW SWITCH (MW.ON)
Q123 2SK161(GR) AM RF ANT
L121 MW ANT
L121,TC121 LW TRACKING ADJ
L123,TC122 LW TRACKING ADJ
L123 LW ANT
L122 MW VT ADJ
L124 LW VT ADJ
D121 KV1260
CF132 AM IF ADJ
SFR131 TUNING DISPLAY LIGHT ON LEVEL ADJ
FM IF
LEVEL DET
S.CURVE
AM MIX
AM OSC
AGC
SD ADJ
LED DRIVE
S METER
PHASE DET
VCO 76KHZ
STEREO SWITCH
STEREO DECODER
TP2 (VT)
C207 0.01

SCHEMATIC DIAGRAM – 5


D LAMP C.B
CD CONT.
C FRONT C.B
D751 1SS133
R751 10K
+5.6V
C751 100/10
D752 1SS133
D753 1SS133
QG
R752 10K
C752 22/16
GND
R753 10K
R754 10K
R755 100K
D755 1SS133
Q751 RN1204
Q752 2SC1815 (GR)
R756 10K
Q753 2SA1015 (GR)
R757 10K
R758 10K
C754 0.33/50
R760 100K
Q754 RN1204
Q755 2SC1815 (GR)
SWITCHING DRIVER
D754 1SS133
R759 10K
VD (5.6V)
T3
K10
T2
K12
Q751, 752, 754, 755
TIME CONSTANT (INPUT DET.)
FR713 15 1/4W
FR714 15 1/4W
PL701
PL702
PL
+12V
PIN13
12V
GND
TO B MAIN C.B CON13

PRACTICAL SERVICE FIGURE

〈TUNER SECTION〉

〈FM SECTION〉

IHF Sensitivity : E,E1,K Models
(THD 3%) 2±4dB (at 87.5, 98.0, 108.0MHz)
(S/N 26dB, Z Model
Use DIN FILTER) 4±4dB (at 87.5MHz)
2±4dB (at 98.0, 108.0MHz)

S/N 50dB Quieting Sensitivity :
E,E1,K Models
28±6dB (at 87.5, 98.0, 108.0MHz)

S/N 46dB Quieting Sensitivity :
Z Model
28±6dB (at 87.5, 98.0, 108.0MHz)

Intermediate Frequency: 10.7MHz

Signal to Noise Ratio : (MONO.)
More than 68dB (at 98.0MHz)
(STEREO)
E,E1,K Models
More than 62dB (at 98.0MHz)
Z Model
More than 60dB (at 98.0MHz)

Total Harmonic Distortion :
(MONO.)
Less than 0.8% (at 98.0MHz)
(STEREO)
Less than 1.5% (at 98.0MHz)

Stereo Separation : More than 25dB (at 98.0MHz)

〈MW SECTION〉

Sensitivity : 55±5dB (at 603kHz)
(S/N 20dB) 52±5dB (at 999kHz)
51±5dB (at 1404kHz)

Intermediate Frequency: 450kHz

〈LW SECTION〉

Sensitivity : 64±5dB (at 162, 198, 290kHz)
(S/N 20dB)

Intermediate Frequency: 450kHz

〈CASSETTE DECK SECTION〉

PB Output Level : More than 3.2V (SP out)
TTS-200 (TCC-130, TTA-161)

REC/PB Output Level
(AUX 1kHz): 2.7V±2dB (SP out)

Distortion (REC/PB) : Less than 3% (NORM.)

Noise (PB) : Less than 30mV
〔DOLBY B NR ON NORM. DECK1(E,Z), DECK2(E1,K), PB〕
Less than 50mV
〔DOLBY B NR ON NORM. DECK2(E,Z), DECK1(E1,K), REC/PB〕

Erasing Ratio : More than 57dB (125Hz)

Channel Separation : More than 28dB (1kHz, 0VU)

Recording Bias Frequency :
100kHz

Wow & Flutter (W-RMS): Less than 0.25% (DECK1, 2)

Tape Speed : 3000Hz±3%
〔TTA-100 (TTA-111S)〕

Take-up Torque : 30~60 g-cm (DECK1, 2)
(0.3~0.59mN·m)

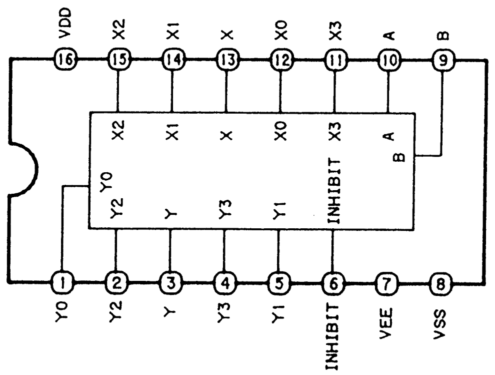
F.F & REW Torque : 55~140 g-cm (DECK1, 2)
(0.54~1.37mN·m)

Back Tension : 2~5 g-cm (DECK1, 2)
(0.02~0.05mN·m)

Test Tape : NORMAL TTA-600 (TTA-119K)
CrO_2 TTA-610 (TTA-119H)

IC BLOCK DIAGRAM

IC, HD14052BP

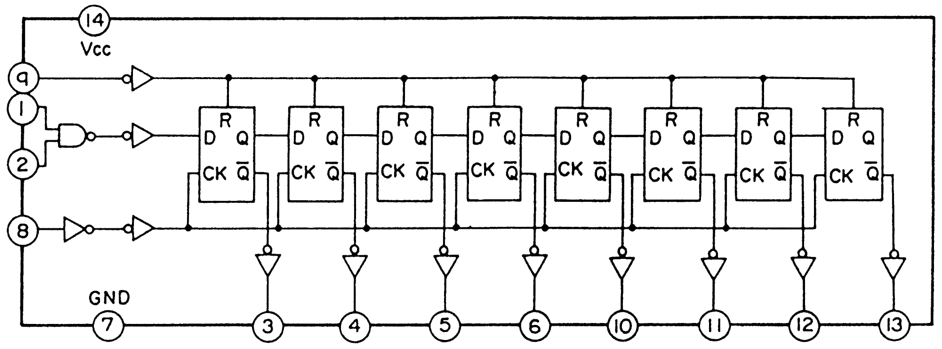

VDD
X2
X1
X
X0
X3
A
B
Y0
Y2
Y
Y3
Y1
INHIBIT
VEE
VSS
16
15
14
13
12
11
10
9
1
2
3
4
5
6
7
8

TRUTH TABLE

CONTROL INPUTS			ON SWITCH	
INHIBIT	B	A		
L	L	L	Y0	X0
L	L	H	Y1	X1
L	H	L	Y2	X2
L	H	H	Y3	X3
H	X	X	—	—

L : LOW LEVEL
H : HIGH LEVEL
X : IRRELEVANT

IC, TC74HC164AP

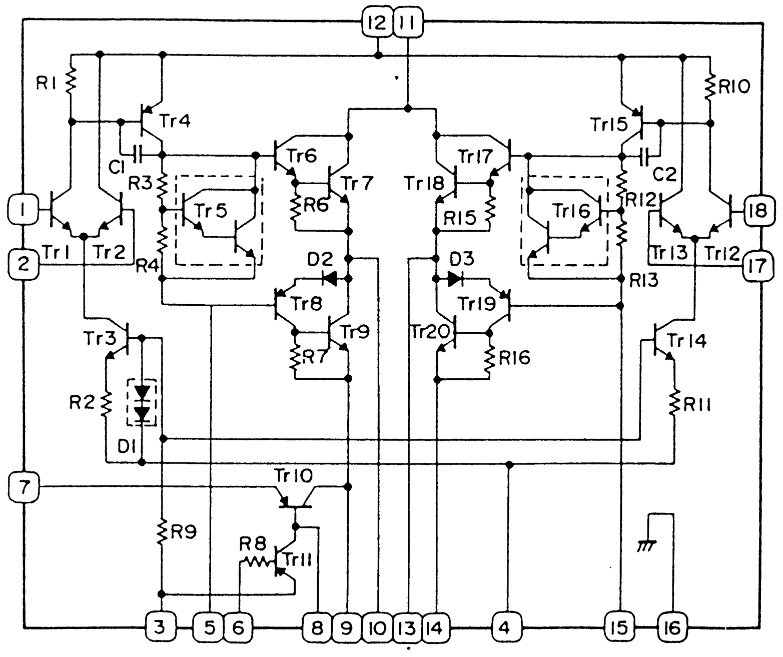

14
Vcc
9
1
2
8
R
D
Q
CK
Q̄
GND
7
3
4
5
6
10
11
12
13

TRUTH TABLE

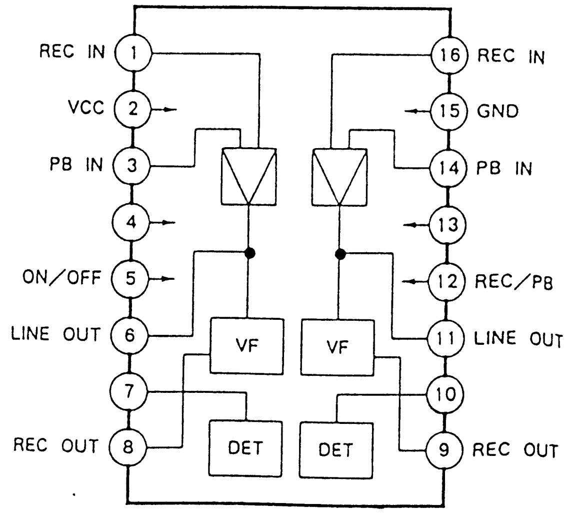
INPUTS				OUTPUTS			
$\overline{CLR}$	CK	SERIAL IN		QA	QB	···	QH
		A	B				
L	X	X	X	L	L	···	L
H	↓	X	X	NO CHANGE			
H	↑	L	X	L	QAn	···	QGn
H	↑	X	L	L	QAn	···	QGn
H	↑	H	H	H	QAn	···	QGn

X : Don't Care

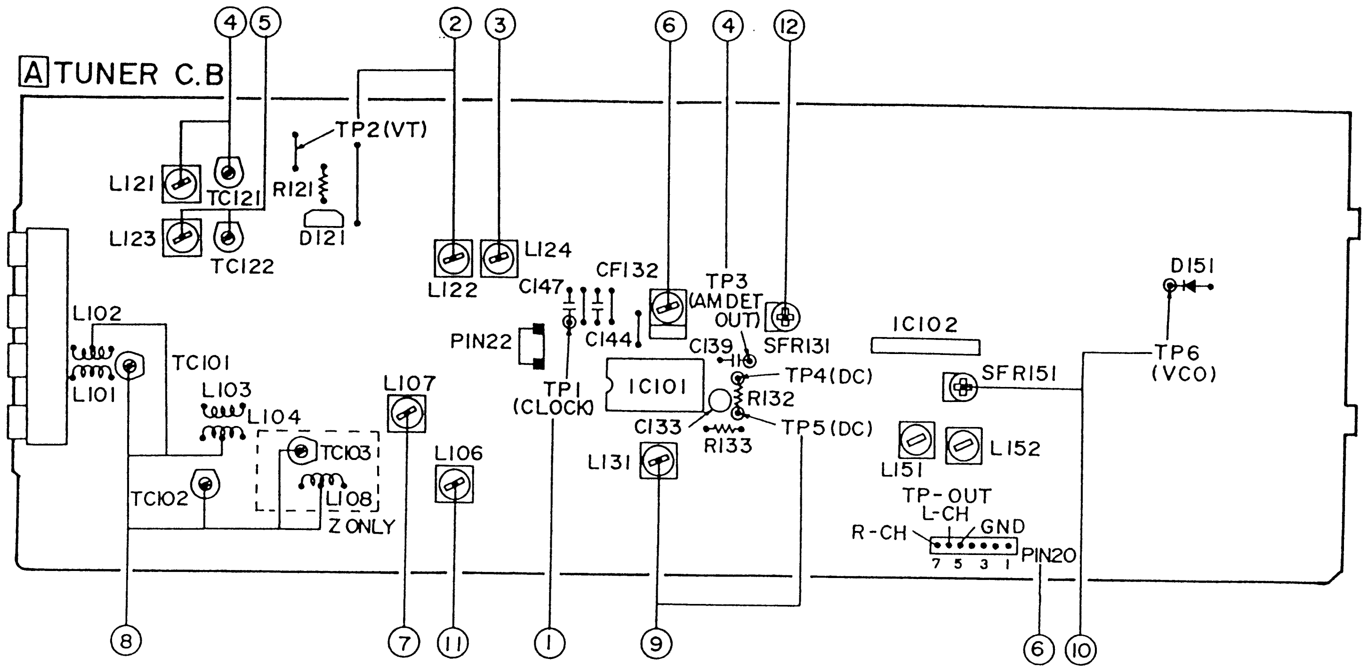
IC, STK4152Ⅱ(E,E1,K), STK4142Ⅱ(Z)

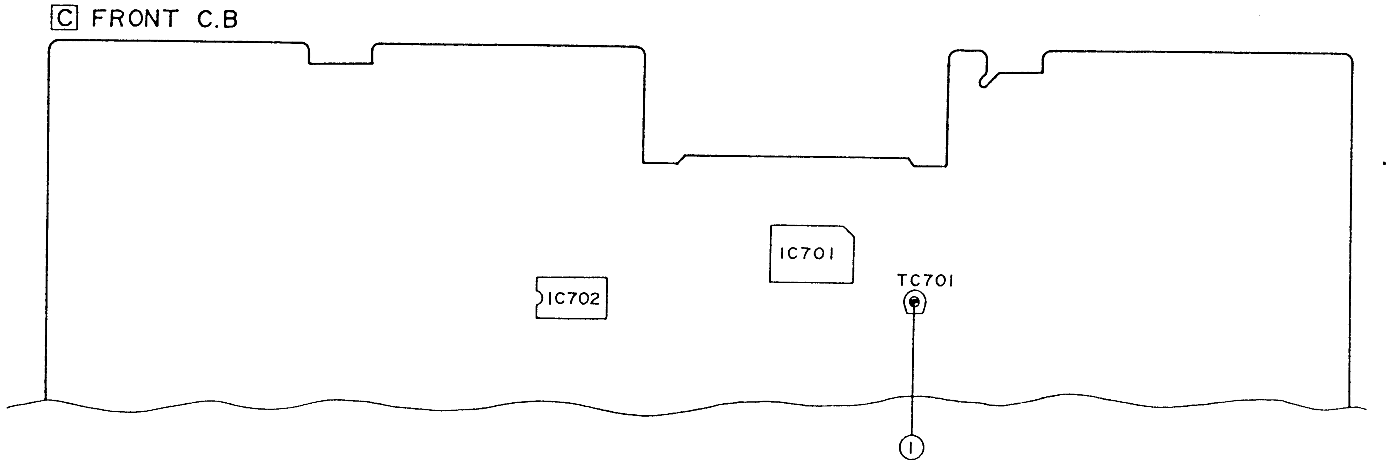

12
11
R1
Tr4
C1
R3
Tr5
Tr6
Tr7
R6
D2
Tr8
Tr9
R7
Tr3
R2
D1
R4
Tr1
Tr2
1
2
7
Tr10
R8
Tr11
R9
Tr17
Tr18
R15
D3
Tr19
Tr20
R16
Tr15
R10
C2
R12
Tr16
Tr13
Tr12
R13
Tr14
R11
18
17
3
5
6
8
9
10
13
14
4
15
16

IC, CX1102


REC IN
VCC
PB IN
ON/OFF
LINE OUT
REC OUT
1
2
3
4
5
6
7
8
16
15
14
13
12
11
10
9
REC IN
GND
PB IN
REC/PB
LINE OUT
REC OUT
VF
VF
DET
DET

ADJUSTMENT


④⑤
②③
⑥④⑫
A TUNER C.B
TP2(VT)
L121
TC121
R121
L123
TC122
D121
L122
L124
CF132
C147
TP3
(AM DET OUT)
PIN22
C144
C139
SFR131
IC102
D151
L102
TC101
L101
L103
L104
L107
TP1
(CLOCK)
IC101
TP4(DC)
R132
SFR151
TP6
(VCO)
TC103
C133
R133
TP5(DC)
L106
L131
L151
L152
TC102
L108
Z ONLY
TP-OUT
L-CH
R-CH
GND
7 5 3 1
PIN20
⑧
⑦ ⑪
①
⑨
⑥ ⑩


C FRONT C.B
IC701
IC702
TC701
①

(TUNER SECTION)

1. Clock Frequency Adjustment

Settings : · Test point : TP1

· Adjustment location : TC701

Method : Set to AM, 1611kHz and adjust so that the test point becomes 2061kHz±0.01kHz.

2. MW VT Adjustment

Settings : · Test point : TP2

· Adjustment location : L122

Method : Set to MW, 522kHz and adjust so that the test point becomes 1.0V±0.05V.

3. LW VT Adjustment

Settings : · Test point : TP2

· Adjustment location : L124

Method : Set to LW, 144kHz and adjust so that the test point becomes 1.5V±0.05V.

4. MW Tracking Adjustment

Settings : · Test point : TP3

L121 · · · · · · · · · · · · · · · · · · 603kHz

TC121 · · · · · · · · · · · · · · · · · · 1404kHz

Method : Adjust so that the output level at test point becomes maximum.

5. LW Tracking Adjustment

Settings : · Test point : TP3

L123 · · · · · · · · · · · · · · · · · · 144kHz

TC122 · · · · · · · · · · · · · · · · · · 290kHz

Method : Adjust so that the output level at test point becomes maximum.

6. AM IF Adjustment

Settings : · Test point : TP-OUT (PIN20)

CF132 · · · · · · · · · · · · · · · · · · 450kHz

7. FM VT Adjustment

Settings : · Test point : TP2

· Adjustment location : L107

Method : Set to FM, 87.5MHz and adjust so that the test point becomes 3.0V±0.05V.

8. FM Tracking Adjustment

Settings : · Test point : TP-OUT (PIN20)

L102, L104, L108(Z) · · · · · · · · · · · 87.5MHz

TC101, TC102, TC103(Z) · · · · · · · · · 108MHz

Method : Adjust so that the output level at test point becomes maximum.

9. DC Balance/MONO Distortion Adjustment

Settings : · Test point : TP4, TP5 (DC balance)

TP-OUT (PIN20)(Distortion)

· Adjustment location : L131

Method : Set to FM, 98.0MHz and adjust L131 so that TP4 and TP5 output becomes 0V±0.02V. Next, adjust L131 so that the distortion becomes minimum (less than 0.8%).

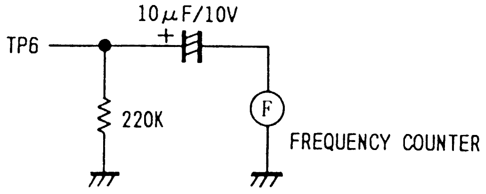
10. MPX VCO Adjustment

Settings : · Test point : TP6

· MODE SW : STEREO

· Adjustment location : SFR151

Method : Connect a capacitor and a resistor as below. Set to FM, 98.0MHz and adjust so that the frequency at test point becomes 38kHz±0.05 kHz.


10μF/10V
TP6
220K
F
FREQUENCY COUNTER

11. FM IF Adjustment

Settings : · Test point : TP-OUT (PIN20)

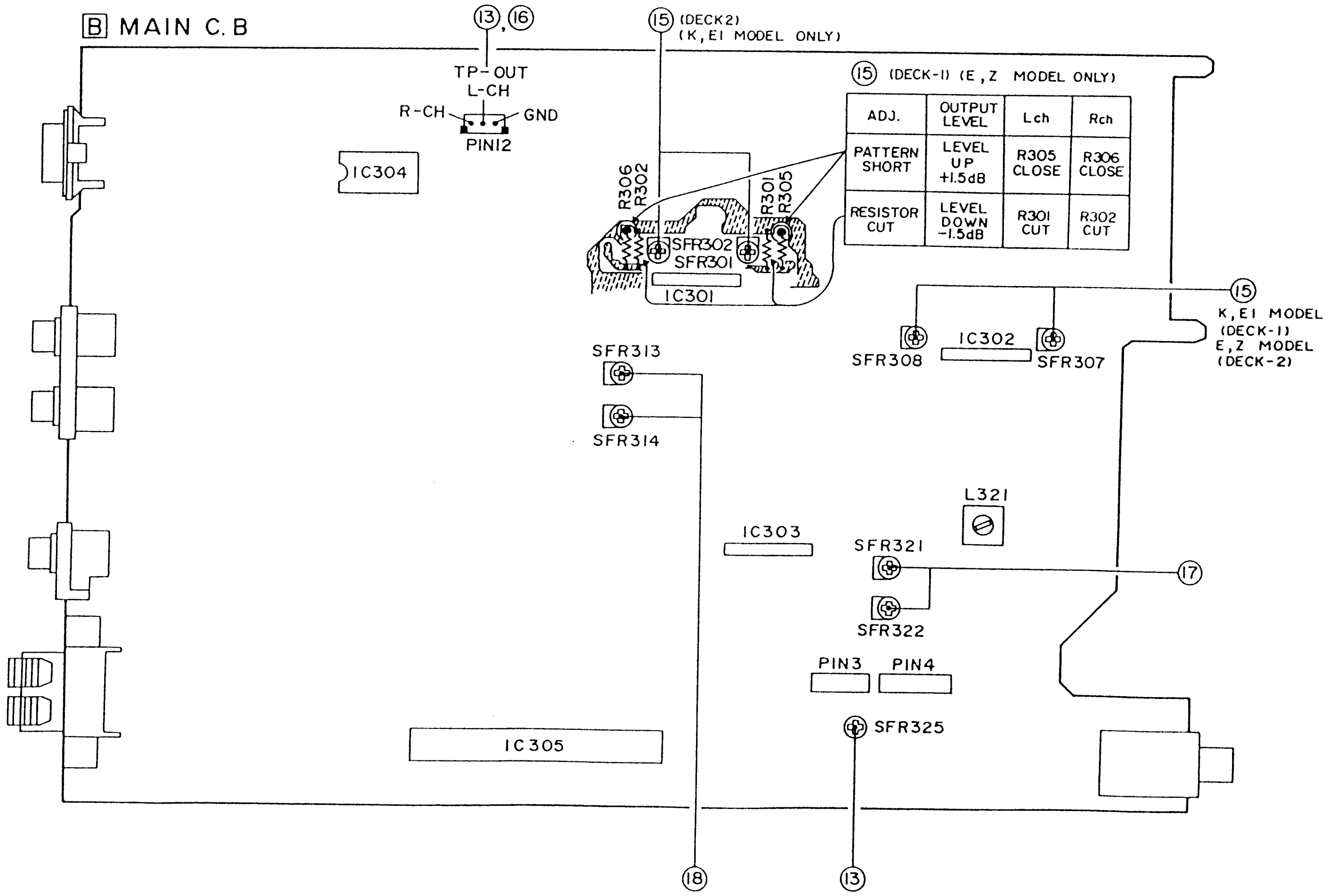
L106 · · · · · · · · · · · · · · · · · 10.7MHz

12. Tune Display Light on Level Adjustment

Settings : · Input signal : 18dB, 98.0MHz

· Adjustment location : SFR131

Method : Tune display is adjusted by SFR131 as make it light on.


B MAIN C.B
⑬,⑯
TP-OUT
L-CH
R-CH
GND
PIN12
IC304
⑮ (DECK2)
(K, EI MODEL ONLY)
⑮ (DECK-1) (E, Z MODEL ONLY)
R306
R302
R301
R305
SFR302
SFR301
IC301
⑮
K, EI MODEL
(DECK-1)
E, Z MODEL
(DECK-2)
SFR313
SFR314
SFR308
IC302
SFR307
L321
IC303
SFR321
SFR322
⑰
PIN3
PIN4
SFR325
IC305
⑱
⑬

ADJ.	OUTPUT LEVEL	Lch	Rch
PATTERN SHORT	LEVEL UP +1.5dB	R305 CLOSE	R306 CLOSE
RESISTOR CUT	LEVEL DOWN -1.5dB	R301 CUT	R302 CUT

(DECK SECTION)

13. Tape Speed Adjustment

Settings : · Test tape : TTA-100 (TTA-111S)
· Test point : TP-OUT (PIN12)
· Adjustment location : SFR325 (DECK-2)

Method : Play back the test tape, adjust for 3000Hz.

14. Head Azimuth Adjustment (DECK-1, DECK-2)

Settings : · Test tape : TTS-310 (TTA-317E)
· Test point : TP-OUT (PIN12)
· Adjustment location : Head azimuth adjustment screw

Method : Play back the 10kHz signal of the test tape and adjust so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode (DECK-2···K, E1 MODEL).

15. PB Sensitivity Adjustment (DECK-1, DECK-2)

Settings : · Test tape : TTS-200 (TTA-161, TCC-130)
· Test point : TP-OUT (PIN12)
· Adjustment location : K, E1 MODEL
SFR307 (DECK-1,Lch)
SFR308 (DECK-1,Rch)
SFR301 (DECK-2,Lch)
SFR302 (DECK-2,Rch)
E, Z MODEL
R301,305 (DECK-1,Lch)
R302,306 (DECK-1,Rch)
SFR307 (DECK-2,Lch)
SFR308 (DECK-2,Rch)

Method : Play back the test tape and adjust so that the output becomes 385mV.

16. PB Frequency Response Check (DECK-1, DECK-2)

Settings : · Test tape : TTS-310 (TTA-317E, SCC-1429)
· Test point : TP-OUT (PIN12)

Method : Play back the test tape and check that the difference in the output levels between the 315Hz and 10kHz signals is within 0dB±2dB and the difference in the sensitivity between the left and right channels at 10kHz is within 2dB.

17. REC/PB Frequency Response Adjustment (DECK-1···K, E1 MODEL)(DECK-2···E, Z MODEL)

Settings : · Test tape : TTA-600 (TTA-119K)
· Test point : TP-OUT (PIN12)
· Dolby NR SW : OFF
· Input signal : VCR/AUX (VCR/AUX VR:MAX)
1kHz, -11.1dB
· Adjustment location : SFR321 (Lch)
SFR322 (Rch)

Method : Set the input signal level so that the voltage at the test point is 270mV and attenuate the level by -20dB. Record and play the 1kHz and 10kHz signals and adjust so that the output of 10kHz signal is 0±1dB for 1kHz signal.

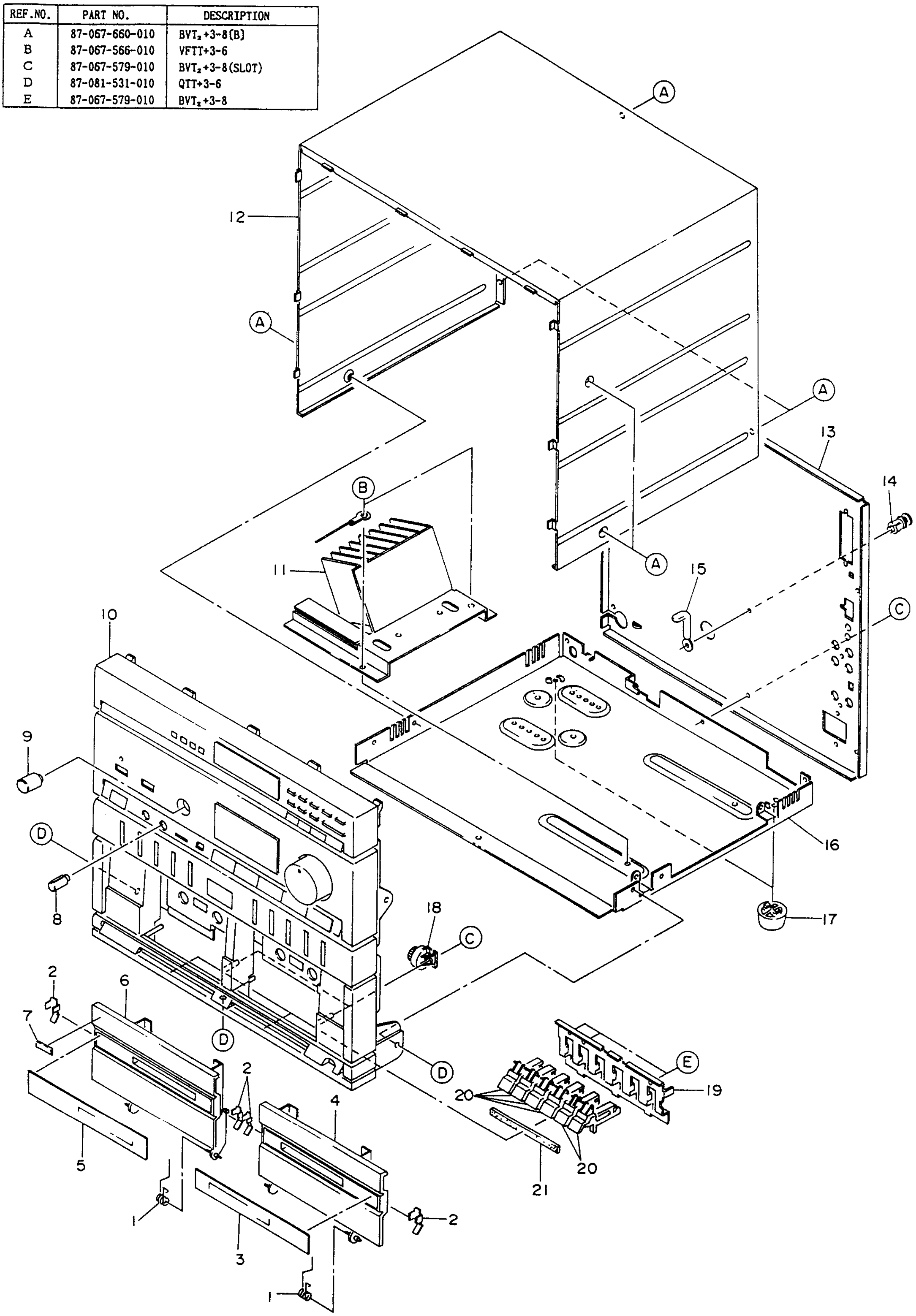
18. REC/PB Sensitivity Adjustment (DECK-1···K, E1 MODEL)(DECK-2···E, Z MODEL)

Settings : · Test tape : TTA-600 (TTA-119K)
· Test point : TP-OUT (PIN12)
· Input signal : VCR/AUX (VCR/AUX VR:MAX)
1kHz, -11.1dB
· Adjustment location : SFR313 (Lch)
SFR314 (Rch)

Method : Set the input signal level so the 1kHz output at the test point is 270mV. Record and play the signal and adjust so that the output is 270mV±1dB.

EXPLODED VIEW – 1

REF.NO.	PART NO.	DESCRIPTION
A	87-067-660-010	BVT$_2$+3-8(B)
B	87-067-566-010	VFTT+3-6
C	87-067-579-010	BVT$_2$+3-8(SLOT)
D	87-081-531-010	QTT+3-6
E	87-067-579-010	BVT$_2$+3-8


A
12
A
A
A
13
14
B
11
15
C
10
9
D
8
16
17
18
C
2
7
6
D
D
E
19
20
2
4
5
20
21
1
2
3
1

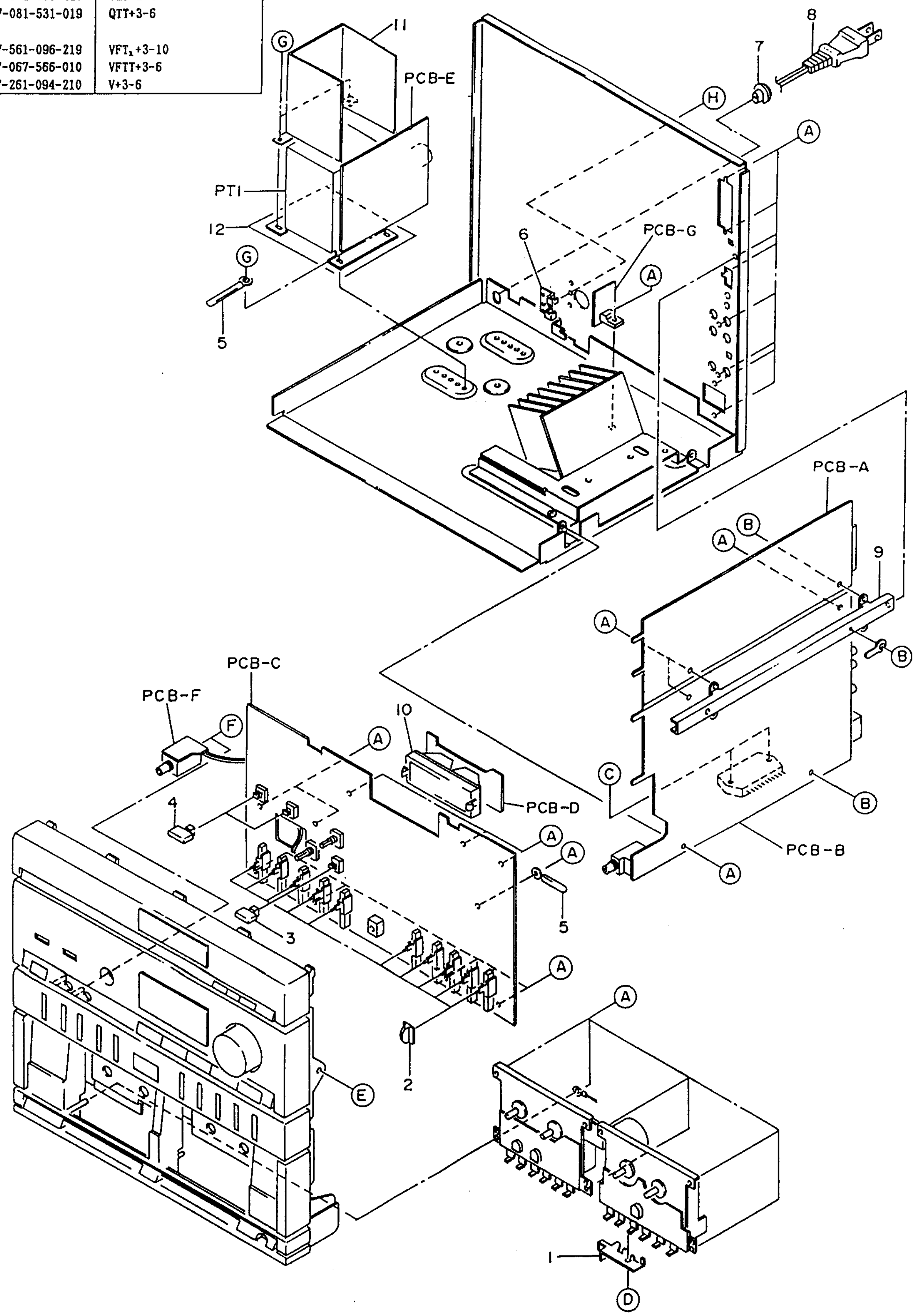
MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1-1	★81-631-209-119	T-SPRING,EJECT		2
	1-2	★81-794-214-010	P-SPRING,CASSETTE BOX		4
	1-3	★83-317-008-019	WINDOW,BOX R(H,U,C,E1,K)	*	1
	1-3	★83-317-028-019	WINDOW,BOX R(E,Z)	*	1
	1-4	83-317-022-019	CASSETTE BOX R(H,U,C,E1,K)	*	1
	1-4	83-317-043-019	CASSETTE BOX R(E,Z)	*	1
	1-5	★83-317-007-019	WINDOW,BOX L	*	1
	1-6	83-317-021-019	CASSETTE BOX L(H,U,C,E1,K)	*	1
	1-6	83-317-042-019	CASSETTE BOX L(E,Z)	*	1
	1-7	★84-764-009-019	BADGE AIWA		1
	1-8	★82-234-018-010	KNOB,BIAS(H)		1
	1-9	★81-689-002-019	KNOB,BALANCE		1
	1-10	★09-047-461-010	CABINET FRONT ASSY(H)	*	1
	1-10	★09-047-462-010	CABINET FRONT ASSY(U,C,K)	*	1
	1-10	★09-047-464-010	CABINET FRONT ASSY(E,E1)	*	1
	1-10	★09-047-463-010	CABINET FRONT ASSY(Z)	*	1
	1-11	---	HEAT,SINK ASSY(H,U,C)		1
	1-12	★83-317-002-119	CABINET,STEEL(H,U,C)	*	1
	1-12	★83-317-026-118	CABINET,STEEL(E,E1,K,Z)	*	1
	1-13	★83-317-003-019	PANEL,REAR(H)	*	1
	1-13	★83-317-048-019	PANEL,REAR(HJ)	*	1
	1-13	★83-317-033-019	PANEL,REAR(U)	*	1
	1-13	★83-317-034-019	PANEL,REAR(C)	*	1
	1-13	★83-317-056-019	PANEL,REAR(E)	*	1
	1-13	★83-317-074-019	PANEL,REAR(E1)	*	1
	1-13	★83-317-037-019	PANEL,REAR(K)	*	1
	1-13	★83-317-038-019	PANEL,REAR(Z)	*	1
	1-14	★87-084-077-019	NYLON RIVET DIA 3.5-4.5		1
	1-15	---	WIRE BINDER		1
	1-16	---	CHASSIS,AMP		1
	1-17	★82-132-010-010	FOOT		2
	1-18	★87-063-143-010	OIL-DUMPER 75		2
	1-19	★83-317-202-019	HOLDER,PUSH	*	2
	1-20	★83-317-017-019	PUSH KEY,DECK(M3)	*	12
	1-21	★81-629-210-019	CUSHION,M,SQ5-105-5		2

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	2-1	★81-597-211-019	HOLDER,WIRE(H,U,C,E1,K)		1
	2-2	★83-317-047-019	KNOB,GE(H)	*	10
	2-3	★83-317-031-019	PUSH BUTTON,H(H,U,C,E1,K)	*	1
	2-4	★83-317-018-019	PUSH BUTTON,D	*	2
	2-5	---	WIRE BINDER		2
	2-6	★83-317-212-019	HOLDER,VS(H,U,C)	*	1
	2-7	★87-085-184-010	BUSHING,AC CORD(H)		1
	2-7	★87-085-189-010	BUSHING,AC CORD(U,C)		1
	2-7	★87-085-185-010	BUSHING,AC CORD(E,E1,K,Z)		1
	2-8	★87-034-590-019	AC CORD(H)		1
	2-8	★87-034-589-019	AC CORD(U,C)		1
	2-8	★87-034-781-018	AC CORD(E,E1,Z)		1
	2-8	★87-034-592-018	AC CORD(K)		1
	2-9	★83-317-201-019	HOLDER,P.C.B(M3)	*	1
	2-10	★83-317-204-019	LAMP HOUSE	*	1
	2-11	★83-317-660-010	CASE SPACE SHIELD PT(H)	*	1
	2-12	★83-318-625-010	SHIELD SPACE PT(K)		1

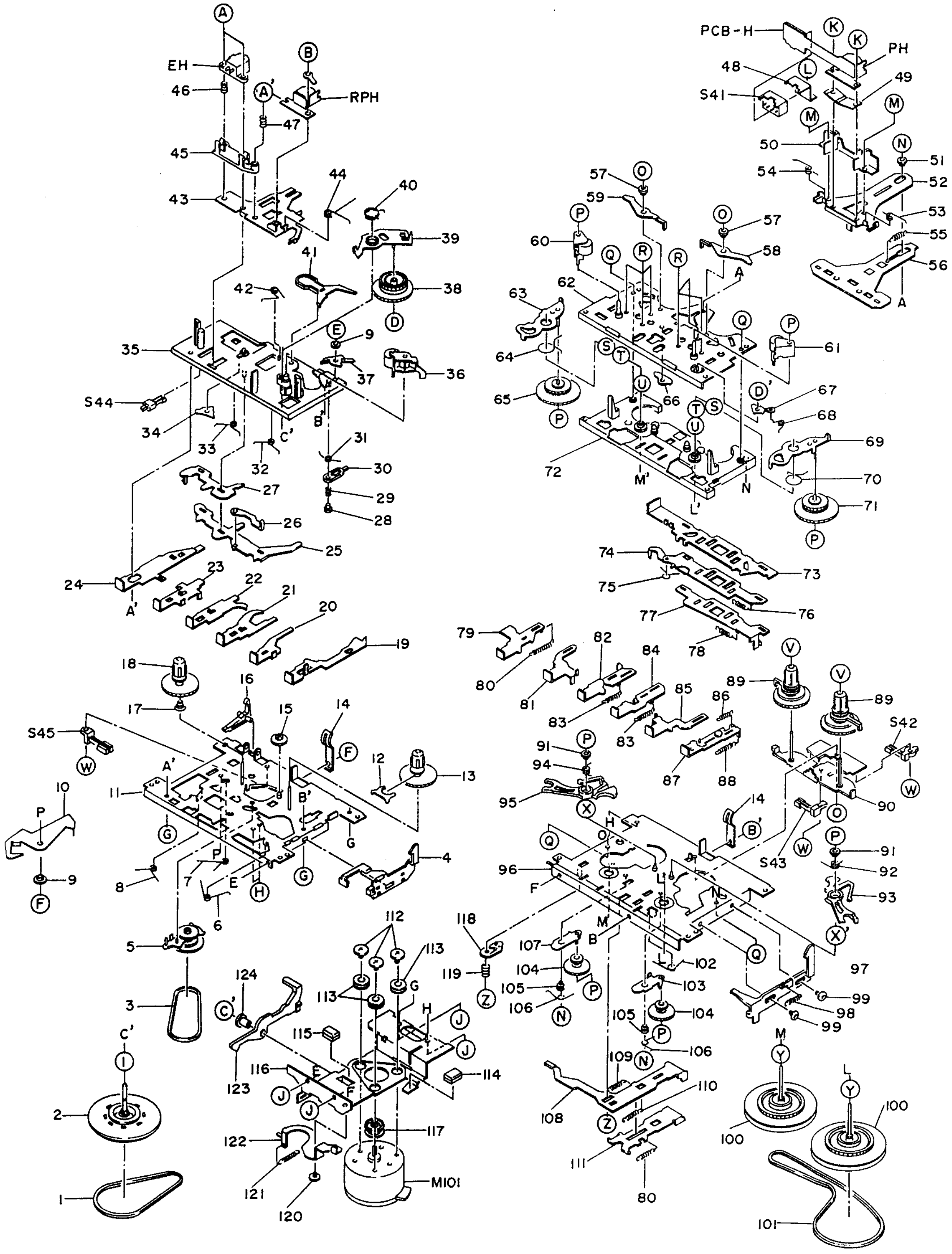
EXPLODED VIEW – 2

REF.NO.	PART NO.	DESCRIPTION
A	87-067-579-010	BVT$_2$+3-8(SLOT)
B	87-067-633-010	BVT$_2$+3-8(CONVEX)
C	87-067-581-010	BVT$_2$+3-15
D	87-571-033-410	VIT+2-4
E	87-081-531-019	QTT+3-6
F	87-561-096-219	VFT$_1$+3-10
G	87-067-566-010	VFTT+3-6
H	87-261-094-210	V+3-6



EXPLODED VIEW – 3 (E1,K)

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-223-000-000	SCREW M2×7.5(⊕⊖CAP)	K	S9-999-200-070	SCREW M2×4.5	U	S9-786-000-000	PW 2×3.5×0.3
B	S9-115-000-000	SCREW M2×3(⊕BIND)	L	S9-682-000-000	SCREW M1.7×2.5(CAMERA S TAPPING)	V	S9-888-000-000	PW 1.2×3×0.4 CUT
C	S9-999-030-130	PW 1.45×3.8×0.5 CUT	M	S9-079-000-000	SCREW M2×6(⊕TAMS)	W	S9-181-000-000	SCREW M2×5(⊕C TAPPING)
D	S9-422-000-000	PW 1.2×3.8×0.3 CUT	N	S9-695-000-000	SCREW M1.7×4(CAMERA S TAPPING)	X	S9-999-000-090	PW 3×8.5×0.13
E	S9-999-200-180	SCREW M2×3.5(PS TAPPING)	O	S9-693-000-000	SCREW 1.7×3(CAMERA S TAPPING)	Y	S9-889-000-000	PW 2.1×3×0.3
F	S9-178-000-000	SCREW M2×3(C TAPPING)	P	S9-421-000-000	PW 1.2×3×0.25 CUT	Z	S9-876-000-000	PW 2.1×5×0.5 CUT
G	S9-679-000-000	SCREW M2×5(P TAPPING BIND)	Q	S9-674-000-000	SCREW M2×6(C TAPPING)	A'	S9-922-000-000	SCREW AZIMUTH M2×7
H	S9-999-180-090	SCREW M2×4.5(CAMERA TAPPING)	R	S9-999-130-010	SCREW M1.7×8(CAMERA S TAPPING)	B'	S9-178-000-000	SPECIAL SCREW M2×3
I	S9-786-000-000	PW 2×3.5×0.3	S	S9-999-000-130	PW 1.75×4×0.3	C'	S9-182-000-000	SCREW M2×6(C TAPPING)
J	S9-180-000-000	SCREW M2×5(⊕C TAPPING)	T	S9-999-030-090	PW 1.45×4×0.5 CUT	D'	S9-502-000-000	E RING S2.0

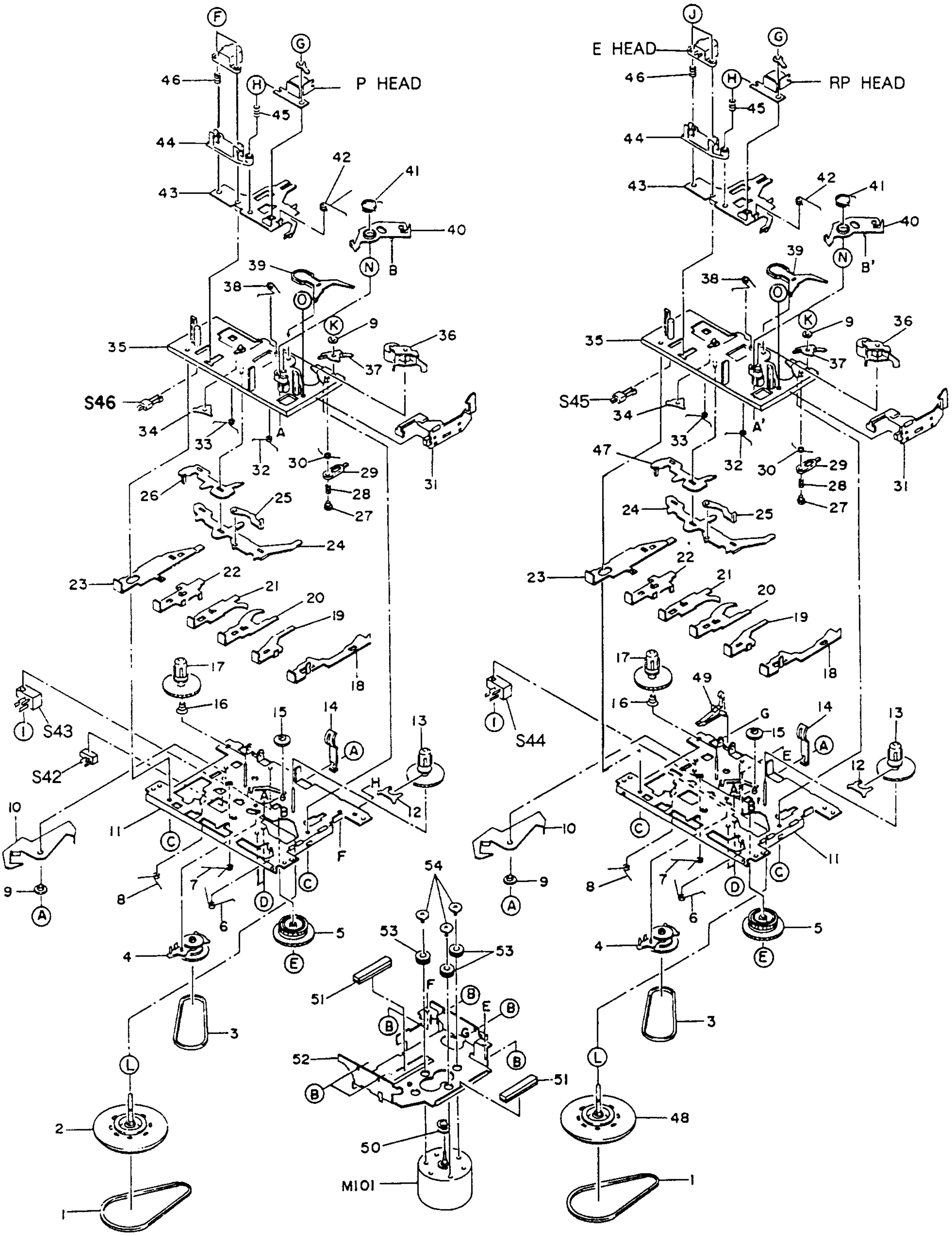


PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	3-1	S1-821-121-730	MAIN BELT		1
	3-2	S1-921-093-050	FLYWHEEL ASSY		1
	3-3	S1-921-070-110	RF BELT		1
	3-4	★S1-921-130-020	EJECT SLIDE LEVER		1
	3-5	★S1-921-073-020	RF CLUTCH ASSY		1
	3-6	★S1-921-140-160	E ACTUATOR SPRING		1
	3-7	★S1-921-140-210	REC BUTTON LEVER SPRING		1
	3-8	★S1-921-140-170	P-SPRING LEVER		1
	3-9	★S1-921-140-370	P ARM COLLAR		2
	3-10	★S1-921-020-010	REC ARM		1
	3-11	---	CHASSIS ASSY		1
	3-12	★S1-921-050-060	SENSOR		1
	3-13	S1-921-053-040	TAKE-UP REEL ASSY		1
	3-14	★S1-829-100-060	PACK SPRING	*	2
	3-15	★S1-821-100-700	FF GEAR		1
	3-16	★S1-821-100-690	RECORD SAFETY LEVER		1
	3-17	★S1-821-100-990	BACK TENSION SPRING		1
	3-18	S1-921-053-040	SUPPLY REEL ASSY		1
	3-19	★S1-921-140-610	PAUSE BUTTON LEVER		1
	3-20	★S1-921-140-660	STOP BUTTON LEVER		1
	3-21	★S1-921-140-250	FF BUTTON LEVER		1
	3-22	★S1-921-140-240	REW BUTTON LEVER		1
	3-23	★S1-921-140-230	PLAY BUTTON LEVER		1
	3-24	★S1-921-140-220	REC BUTTON LEVER		1
	3-25	★S1-921-140-080	PUSH BUTTON ACTUATOR		1
	3-26	★S1-921-140-640	E KICK LEVER		1
	3-27	★S1-921-140-090	SWITCH ACTUATOR		1
	3-28	★S1-921-140-110	PAUSE STOPPER		1
	3-29	★S1-921-140-120	PAUSE LEVER SPRING		1
	3-30	★S1-921-140-120	PAUSE LEVER(E)		1
	3-31	★S1-921-141-3A0	P-SPRING,CONTROL		1
	3-32	★S1-921-140-150	BUTTON LEVER SPRING(B)		1
	3-33	★S1-921-140-140	BUTTON LEVER SPRING(A)		1
	3-34	★S1-921-140-200	PR STOPPER		1
	3-35	★S1-921-143-16W	BASE ASSY		1
	3-36	S1-921-043-040	PINCH ROLLER ARM ASSY		1
	3-37	★S1-921-140-340	P ARM		1
	3-38	★S1-921-260-020	CAM GEAR		1
	3-39	★S1-921-265-020	GEAR PLATE ASSY		1
	3-40	★S1-921-260-050	GEAR PLATE SPRING		1
	3-41	★S1-921-260-4A0	SENSING LEVER		1
	3-42	★S1-921-140-180	M CONTROL SPRING		1
	3-43	★S1-921-030-140	HEAD PANEL		1
	3-44	★S1-921-030-090	P-SPRING,PANEL		1
	3-45	★S1-921-030-6A0	HEAD BASE		1
	3-46	★S1-821-030-080	EH SPRING		1
	3-47	★S1-821-030-070	AZIMUTH SPRING		1
	3-48	★S1-851-160-010	SWITCH BRACKET		1
	3-49	★S1-851-040-050	HEAD SPRING PLATE		1
	3-50	★S1-851-040-520	TAPE GUIDE		1
	3-51	★S1-851-040-040	H.P. COLLAR		1
	3-52	★S1-851-040-010	HEAD PANEL		1
	3-53	★S1-851-040-060	PINCH ROLLER SPRING F		1
	3-54	★S1-851-040-070	PINCH ROLLER SPRING R		1
	3-55	★S1-851-040-090	R.C. PLATE SPRING		1
	3-56	★S1-851-040-020	R.C. PLATE		1
	3-57	★S1-851-180-070	CONTROL ARM COLLAR		2
	3-58	★S1-851-180-050	AUTO CONTROL ARM F		1
	3-59	★S1-851-180-060	AUTO CONTROL ARM R		1
	3-60	S1-851-105-040	PINCH ROLLER R ASSY		1
	3-61	S1-851-095-040	PINCH ROLLER F ASSY		1
	3-62	★S1-851-183-010	SUB CHASSIS ASSY		1
	3-63	★S1-851-063-010	T GEAR ARM R ASSY		1
	3-64	★S1-851-060-030	T GEAR ARM R SPRING		1
	3-65	★S1-851-060-020	T CAM GEAR R		1
	3-66	★S1-851-180-040	RC ARM		1
	3-67	★S1-851-030-010	TURN OVER ARM		1
	3-68	★S1-851-030-020	TURN OVER SPRING		1
	3-69	★S1-851-053-010	T GEAR ARM F ASSY		1
	3-70	★S1-851-050-040	T GEAR ARM F SPRING		1

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	3-71	★S1-851-050-030	T CAM GEAR F		1
	3-72	★S1-851-025-010	BOTTOM BASE ASSY		1
	3-73	★S1-851-020-170	SLIDE PLATE		1
	3-74	★S1-851-023-010	LOCK ACTUATOR		1
	3-75	★S1-851-020-200	LOCK RELEASE SPRING		1
	3-76	★S1-851-020-250	LOCK ACTUATOR SPRING		1
	3-77	★S1-851-023-020	SWITCH ACTUATOR ASSY		1
	3-78	★S1-851-020-760	SWITCH ACTUATOR SPRING		1
	3-79	★S1-851-023-090	MODE BUTTON LEVER ASSY		1
	3-80	★S1-851-020-240	PROG BUTTON LEVER SPRING		2
	3-81	★S1-851-020-320	PLAY BUTTON LEVER		1
	3-82	★S1-851-020-350	FF BUTTON LEVER R		1
	3-83	★S1-851-020-240	FF BUTTON LEVER SPRING		2
	3-84	★S1-851-020-340	FF BUTTON LEVER F		1
	3-85	★S1-851-020-310	STOP BUTTON LEVER		1
	3-86	★S1-851-020-270	PULL ARM SPRING		1
	3-87	★S1-851-023-040	PROG BUTTON LEVER ASSY		1
	3-88	★S1-851-020-220	BUTTON LEVER SPRING		1
	3-89	S1-851-115-010	REEL ASSY		2
	3-90	★S1-851-113-010	REEL PLATE ASSY		1
	3-91	★S1-851-200-050	SPRING,STOPPER		2
	3-92	★S1-851-200-030	AUTO LEVER R SPRING		1
	3-93	★S1-851-200-010	AUTO LEVER F		1
	3-94	★S1-851-200-040	AUTO LEVER F SPRING		1
	3-95	★S1-851-200-020	AUTO LEVER R		1
	3-96	---	CHASSIS ASSY		1
	3-97	★S1-851-170-030	EJECT SLIDE LEVER		1
	3-98	★S1-851-170-020	EJECT SLIDE LEVER SPRING		1
	3-99	★S1-821-120-230	P.K. COLLAR SCREW A		2
	3-100	S1-851-125-050	FLYWHEEL ASSY		2
	3-101	S1-821-121-420	MAIN BELT		1
	3-102	★S1-851-020-210	STOP BUTTON LEVER SPRING		1
	3-103	★S1-851-073-010	FF GEAR ARM F ASSY		1
	3-104	★S1-851-070-030	FF GEAR		2
	3-105	★S1-851-070-050	FF GEAR ARM COLLAR		2
	3-106	★S1-851-070-040	FF GEAR ARM SPRING F		2
	3-107	★S1-851-083-010	FF GEAR ARM R ASSY		1
	3-108	★S1-851-040-080	RELEASE PLATE		1
	3-109	★S1-851-020-420	BUTTON LEVER SPRING P		1
	3-110	★S1-851-040-100	R.C. SPRING		1
	3-111	★S1-851-160-020	FF SW PLATE		1
	3-112	★S1-851-140-180	MOTOR COLLAR SCREW		3
	3-113	★S1-821-120-660	MOTOR RUBBER		3
	3-114	★S1-821-121-090	ANTI-VIBRATION FELT MAT		1
	3-115	★S1-800-100-840	ANTI-VIBRATION FELT MAT		1
	3-116	★S1-851-140-070	MOTOR,BRACKET		1
	3-117	★S1-851-140-300	MOTOR,PULLEY		1
	3-118	★S1-821-010-150	PAUSE LEVER(U,C,K)		1
	3-119	★S1-821-010-160	PAUSE LEVER SPRING(U,C,K)		1
	3-120	★S1-821-120-230	P.K. COLLAR SCREW A(H)		1
	3-121	★S1-851-140-040	P.K. LEVER SPRING(H)		1
	3-122	★S1-851-140-060	P.K. LEVER A(H)		1
	3-123	★S1-851-120-250	P.K. LEVER B(H)		1
	3-124	★S1-821-120-650	COLLAR SCREW B		1

EXPLODED VIEW – 4 (E,Z)

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-179-000-000	SCREW M2×3(C TAPPING)	F	S9-821-000-000	SCREW M2×8(⊕ ⊖CAP)	K	S9-999-200-180	SCREW M2×3.5(P TAPPING)
B	S9-180-000-000	SCREW M2×4(C TAPPING)	G	S9-115-000-000	SCREW M2×3(⊕BIND)	L	S9-182-000-000	SCREW M2×6(C TAPPING)
C	S9-679-000-000	SCREW M2×5(P TAPPING BIND)	H	S9-922-000-000	SCREW AZIMUTH M2×7	M	S9-422-000-000	PW 1.2×3.8×0.3 CUT
D	S9-999-180-090	SCREW M2×4.5(TAPPING FOR CAMERA)	I	S9-181-000-000	SCREW M2×7(C TAPPING)	N	S9-999-030-130	PW 1.45×3.8×0.5 CUT
E	S9-004-000-000	SCREW M2×8	J	S9-223-000-000	SCREW M2×7.5(⊕ ⊖CAP)	O	S9-786-000-000	PW 2×3.5×0.3



F
G
H
P HEAD
J
E HEAD
RP HEAD
46
45
44
43
42
41
40
B
B'
N
O
K
39
38
37
36
35
S46
S45
34
33
32
A
A'
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
47
48
49
S43
S44
S42
I
A
C
D
E
L
51
52
53
54
50
M101

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	4-1	S1-821-120-220	MAIN BELT		2
	4-2	S1-921-093-050	FLYWHEEL ASSY		1
	4-3	S1-921-070-030	RF BELT		2
	4-4	★S1-921-073-020	RF CLUTCH ASSY		2
	4-5	★S1-921-260-020	CAM GEAR		2
	4-6	★S1-921-140-160	E-SPRING,ACTUATOR		2
	4-7	★S1-921-140-210	REC BUTTON LEVER SPRING		2
	4-8	★S1-921-140-170	P-SPRING,LEVER S		2
	4-9	★S1-921-140-370	P ARM COLLAR		4
	4-10	★S1-921-020-010	REC ARM		2
	4-11	---	CHASSIS ASSY		2
	4-12	★S1-921-050-060	SENSOR		2
	4-13	S1-921-053-010	TAKE-UP REEL ASSY		2
	4-14	★S1-821-100-990	PACK SPRING		2
	4-15	★S1-821-100-700	FF GEAR		2
	4-16	★S1-829-100-100	BACK TENSION SPRING		2
	4-17	S1-921-053-020	SUPPLY REEL ASSY		2
	4-18	★S1-921-140-270	PAUSE BUTTON LEVER		2
	4-19	★S1-921-140-260	STOP BUTTON LEVER		2
	4-20	★S1-921-140-250	FF BUTTON LEVER		2
	4-21	★S1-921-140-240	REW BUTTON LEVER		2
	4-22	★S1-921-140-230	PLAY BUTTON LEVER		2
	4-23	★S1-921-140-220	REC BUTTON LEVER		2
	4-24	★S1-921-140-080	PUSH BUTTON ACTUATOR		2
	4-25	★S1-821-011-590	E KICK LEVER		2
	4-26	★S1-921-140-400	SWITCH ACTUATOR		1
	4-27	★S1-921-140-110	PAUSE STOPPER		2
	4-28	★S1-921-140-120	PAUSE LEVER SPRING		2
	4-29	★S1-921-141-0A0	PAUSE LEVER		2
	4-30	★S1-921-140-130	P-SPRING,CONTROL		2
	4-31	★S1-921-130-020	EJECT SLIDE LEVER		2
	4-32	★S1-921-140-150	BUTTON LEVER SPRING(B)		2
	4-33	★S1-921-140-140	BUTTON LEVER SPRING(A)		2
	4-34	★S1-921-140-200	PR STOPPER		2
	4-35	★S1-921-143-010	BASE ASSY		2
	4-36	S1-921-043-010	PINCH ROLLER ARM ASSY		2
	4-37	★S1-921-140-340	P ARM		2
	4-38	★S1-921-140-180	M CONTROL SPRING		2
	4-39	★S1-921-260-040	SENSING LEVER		2
	4-40	★S1-921-265-010	GEAR PLATE ASSY		2
	4-41	★S1-921-260-050	GEAR PLATE SPRING		2
	4-42	★S1-921-030-090	P-SPRING,PANEL		2
	4-43	★S1-921-030-020	HEAD PANEL		2
	4-44	★S1-921-030-060	HEAD BASE		2
	4-45	★S1-821-030-070	AZIMUTH SPRING		2
	4-46	★S1-821-030-080	EH SPRING		2
	4-47	★S1-921-140-080	SWITCH ACTUATOR		1
	4-48	S1-921-093-110	FLYWHEEL ASSY		1
	4-49	★S1-821-100-690	RECORD SAFETY LEVER		1
	4-50	★S1-921-120-130	MOTOR PULLEY		1
	4-51	★S1-921-120-120	ANT VIBRATION FELT MAT		2
	4-52	★S1-921-120-110	MOTOR BRACKET		1
	4-53	★S1-820-130-060	MOTOR RUBBER		3
	4-54	★S1-821-120-020	MOTOR COLLAR SCREW		3

SPEAKER LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1	★83-324-001-010	CABINET(705)		2
	2	★83-323-001-010	CABINET R(707)		1
	3	★83-323-002-010	CABINET L(707)		1
	4	★83-323-003-010	CABINET(750)		2
	5	★83-324-002-010	PANEL WOOFER(705)		2
	6	★83-323-005-010	PANEL WOOFER(707,750)		2
	7	★83-323-006-010	PANEL TWEETER		2
	8	★83-323-007-010	PANEL S TWEETER(707)		2
	9	★83-323-008-010	PANEL DUCT(750)		2
	10	★83-323-009-010	DUCT(707)		2
	11	★83-102-018-010	FASTENER F(707)		2
	12	★83-324-004-010	GRILL FRAME ASSY(705)		2
	13	★83-323-010-010	GRILL FRAME ASSY(707)		2
	14	★83-315-003-010	FRONT GRILL ASSY(750)		2
	15	83-324-609-010	SPEAKER WOOFER(705)		2
	16	81-654-601-010	SPEAKER WOOFER(707)		2
	17	83-323-601-010	SPEAKER WOOFER(750)		2
	18	83-324-605-010	SPEAKER TWEETER(750)		2
	19	83-308-603-010	SPEAKER TWEETER(707)		2
	20	83-323-603-010	SPEAKER TWEETER(750)		2
	21	81-654-605-010	TWEETER CERAMIC(707)		2
	22	★83-082-041-010	CORD BUSHING		2
	23	★83-096-614-010	SPEAKER CORD		2

ACCESSORIES／PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1	★83-343-916-019	INSTRUCTION BOOKLET,E/Z S (E,Z)	*	1
	2	★83-343-908-018	INSTRUCTION BOOKLET,E1(E1)	*	1
	3	★83-343-905-018	INSTRUCTION BOOKLET,K(K)	*	1
	4	★81-653-647-010	AM-LOOP ANT(6T)CON(E,E1,K)		1
	5	★81-653-645-010	AM-LOOP ANT(6T)NC(Z)		1
	6	★81-748-632-010	FM FEEDER ANT,N(E,E1,K)		1
	7	★83-335-010-019	RC-T75FYBN		1